

# Business Resilience a Dynamic Capability to Overcome Extreme Adversity

### Resiliencia empresarial una capacidad dinámica para enfrentar la adversidad extrema

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#### **ABSTRACT:**

This article delimits the business resilience concept making however a direct association with dynamic capabilities, and reviews 3 crucial moments a turbulent company endures and has to overcome in order to be resilient. It is being presented in the form of a case study of the Colombian construction company AIA with a qualitative methodology. With the above, I want to share with the scientific community the findings that will explain how theories of dynamic capability and resilience could be a strategy for business recovery. The final results reflect what an organization must not do and thus should do in order to use this powerful dynamic capability better known as resilience to stay in or get to a number one spot in the market.

**Keywords:** Business resilience, business turbulence, dynamic capabilities, Medellín

#### **RESUMEN:**

Este artículo delimita el concepto de resiliencia empresarial estableciendo una asociación directa con las capacidades dinámicas, y revisa tres momentos cruciales que una empresa turbulenta padece y debe superar con el fin de ser resiliente. Se presenta bajo la forma de un estudio de caso de la empresa constructora colombiana AIA con una metodología cualitativa. Con lo anterior, deseo compartir con la comunidad científica los hallazgos que explicarán cómo las teorías de capacidad dinámica y resiliencia podrían ser una estrategia para la recuperación empresarial. Los resultados finales reflejan lo que una organización no debe hacer y, por lo tanto, debe hacer para utilizar esta poderosa capacidad dinámica, mejor conocida como resiliencia, para permanecer o llegar al puesto número uno en el mercado. Palabras clave: Resiliencia empresarial, turbulencia, capacidades dinámicas, Medellin.

### **1. Introduction**

The world has a constant need for change, to reinvent itself, to grow and, along with that, to innovate. This need has led each country to become a machine of creation, with its own

rhythms some faster than others but always with the same purpose. In Colombia we see this phenomenon explode and that is why it has been the eye of the world for several reasons different from the violence for which it has been stigmatized since the time of the worldly famous narco-terrorist Pablo Escobar. An important commemoration was made when Medellín was named the most innovative city in the world, with new roads, relevant new education projects and the Trolley car "*tranvía*". Especially for the rapid and notorious progress in the industrial-economic area that has attracted several international franchises and foreign businesses to relocate to this country. However, these positive aspects do not manage to diminish other aspects that within the growth, will bring great and perhaps catastrophic problems.

One of the most troubled sectors in Colombia is evidently construction with accelerated growths in which it begins to experience a real estate bubble that could probably lead the country to fall into a predicament similar to the one of the year 2008 that harmed the United States ' economy and frightened all others who had invested in this perilous market, a problem not yet solved. Several large and prestigious companies can be named in Colombia facing numerous lawsuits and colossal gaps in their financial situations that are disappearing before our eyes, e.g. CDO company for the collapse of the Space building which today brings enormous losses and difficult legal situations to overcome. Business longevity in Colombia is one of the main reasons why today it is the third most innovative country in Latin America according to the Latin Business Chronicle, but unfortunately possesses an average business seniority of only 12 years (Revista Dinero, 2014).

Increasing the average of business longevity will result in the proliferation of long-lasting Colombian companies and this will not only maintain that position vis-a-vis Latin America in terms of innovation, but also attract more foreign investors and increase the total investment in the country. Unless this phenomenon is studied in depth, it will not be possible to develop its total growth potential in the economic scope as well as in the industrial scope. This leads to several concerns: What are the reasons why these companies are not longlasting? Are the people who create the companies or those who regulate them responsible for these reasons? In the event that companies are in trouble, what are the strategies to avoid disappearing, if any? Why do companies in the construction sector encounter great difficulties? Will all companies have the opportunity to save themselves before they perish?

This research is based initially on Medellín and seeks to make an analysis of this quandary by examining one of the largest companies in the construction sector in the city, AIA. The company was on the verge of bankruptcy after being roughly the first and most important construction company in the country, with award-winning recognitions. The objective is to identify the causes and understand the root of their difficulties as well as the tactics being executed in order to achieve an even greater success, hence finding a viable solution to the problem of business longevity in Colombia. Finally, the proposal of linking Dynamic Capability theory together with Resilience as one of the possible strategies for explaining this enigma will be investigated and linked directly to the case studied.

This article has a third moment structure in which every step and juncture unravels, letting the reader experience the development of resilience as a dynamic capability in an organizational sense. These two concepts come together to incorporate a new area in a company's ecosystem that betters its current functionality where R+D is fundamental for growth and improvement but lacks the examination of real prevailing or impending threats. For this design to be properly proliferated, AIA had to be thoroughly studied in order to demonstrate and further exemplify why this is necessary and could solve the concerning business longevity absence in Colombia. The first moment AIA goes through is the occurrence of preceding events that somehow caused the crisis that struck in the second moment, during which the company reacts and confronts the situation revealing the plan that was then set into motion leading lastly into the third moment, the present state the company finds itself in. Not only will the case study show what a resilient company undergoes after being in a turbulent state but how it may have gotten there and certainly what to avoid, along with a proposal design that can help any organization become resilient when needed.

# 2. Conceptual Grounding

### 2.1. Business resilience

Since the mid-20th century, researchers in the field of business management have always been concerned about proposing alternatives to manage the turbulence of the environment. Dill (1958); Emery & Trist (1963), Terrebery (1968); Child (1972,1975); Ansoff (1969); Mc Cann & Selski (1984); Gueguen (1997); Grant (2003); Caldart & Ricart (2006); Ramirez & Selsky (2016).

As a result of their work, one of the proposed options is that of resilience. A capacity which, according to García-Merino, Rivera and Saints-Alvarez, (2015) allows the confrontation of moments of extreme adversity as it is dynamic. This concept of resilience that comes from the Latin "resilire" (which is interpreted as jumping backwards, return from a leap) has its origins in traditional Chinese medicine. It was later used in physics and engineering to explain the behavior of some objects or materials. Over time disciplines such as ecology, psychology, economics, anthropology, and sociology have used resilience to explain other units of analysis such as systems (for example, the hospital system), individuals and social movements. By the beginning of the 1980's, the concept was incorporated for the first time in the business field by Staw et al. (1981) who made progress on the evolutionary theory while proposing the reconfiguration of the shares of the company as an alternative to face the threats of the environment, bringing them to a state prior to the discontinuities that generate moments of adversity.

Subsequently, in accordance with Linnenluecke (2017) as a result of the incidents presented in Chernobyl, Exxon Valdez, Bhopal and the Space Shuttle Challenger, researchers were concerned with studying the causes and consequences for these organizations of such events, which led him to reconfigure the form assumed before, and take a step back in order to move forward.

Years later, Wildavsky (1988) would be the one to progress in the reflection and define resilience as the organization's ability to simplify the rebound effect and thus be able to cope with the difficulties. Toward 1994, the term was included in an article from the Canadian Business Review, in which Doe (1994) indicates that resilience has to do with businesses ability to be flexible and continuously adapt to new situations.

From that moment on the concept began to be further developed, it is worth remembering the work of Horne (1997) and Horne and Orr (1998) for whom the resilience is the fundamental quality that a company possesses to respond productively and significantly to change. In the following years, articles are published in which resilience is seen as the individual quality of the companies that face some difficulties and return to their original position. For Weick, Sutcliffe and Obstield (1999) it is the company's ability to recover in the presence of adverse events. And, by the end of the 1990s, Edmonson (1999) points out that it is the ability to maintain the functions and the results in the middle of tension.

That approach, however, varies substantially in the presence of unexpected events that have occurred in the environment that transform the competitive context that surrounds the business activity. This is the case, for example, of the terrorist attacks at the beginning of the century, which generated uncertainty and contributed to the economic crisis, and the transformations of the industries, which prompted the researchers to explore in greater depth the concept of resilience.

In those years, two articles were published in the Harvard Business Review that contributed to this reflection: the one from Coutu (2002), in which resilience is presented as the organization's ability and capacity to be strong in times of stress and change, and Hamel and Välikangas (2003), where it is conceived as the capacity of permanent reconstruction. Regardless of the lack of clarity of the concept and the scarce existence of literature, other authors began to further look into it (Worline.t et al 2002; Rudolph & Repenning, 2002; Gittell, Cameron, Lim & Rivas 2006). Particularly, various publications emerged in strategy discipline journals, more informative than academic. This is the case of the magazine

Strategy+Business, belonging to the consulting firm Booz & Company, in which the article of Starr, Delurey and Newfrock (2003), and MIT Sloan Management Review, is published, and where the article Reinmoeller and Van BaardwiJK (2005) is also published.

More recently, and with an eye set on the turbulence of the environment, the authors have specifically highlighted the dynamic dimension of the concept (Lengnick-Hall, Beck & Lengnick-Hall, 2011). However, these same authors point out that in this perspective could include previous articles that already collected, if only implicitly, this dynamic dimension. This is the case, for example, of Weick (1993), Coutu (2002), Hamel and Välikangas (2003), Lengnick-Hall and Beck (2005), Freeman, Hirschhorn and Maltz (2004) and Jamrog et al. (2006). Thus, resilience is defined as the ability to reduce vulnerability, the ability to change and adapt, as well as the ability to recover quickly from unanticipated events (Erol, Sauser & Mansouri 2010). Let us remember that dynamic capabilities are defined as the company's ability to integrate, build and reconfigure their internal competences due to the presence of environmental and organizational contingencies (Teece, Pisano & Shuen 1997). It is clear that companies are skill and dynamic capability generators and that they are not only concerned about resisting situations of adversity, but, above all, about learning from them and to achieve the flexibility that allows them to grow, establish a more solid structure and last in time. We now reach a meeting point between the concept of resilience and the economic-business approach of dynamic capabilities, which has been the subject of analysis by Teece et Al. (1997), Eisenhardt and Martin (2000) among others.

The recently published theoretical revisions of the concept aim to provide clarity on the main authors, definitions, perspectives and applications of resilience. It is important to rescue the work of Bhamra, Dani and Burnard (2015) where not only a review of the literature is constructed but also identifies the different fields of application of the concept, in particular human relations, and what is named resilience of infrastructure.

Linnenluecke (2017) makes an extensive review of the concept of turbulence in the literature published between 1977 and 2014, concluding that there are new topics on which work can be done as are the relationship with psychological capital, applications in different cultural contexts, leadership, supply chain, inventory management and even institutional analysis. Xiao and Cao (2017) propose a theoretical model on how organizations can deal with discontinuities and ruptures that risk their permanence in the market. Finally, the most recent article on resilience is by Ruiz-Martin, Lopez-Paredes and Wainer (2018) which expresses the outcome of a literature review that includes not only the organizational resilience and focuses on analyzing the concept and measurement of resilience. For more detail of the concept of turbulence, a table is included below containing various definitions on resilience in the field of business management.

Year	Author	Definition	Publication
1988	Wildavsky	An organization's ability to simplify the "Rebound Effect".	Transaction Publishers
1994	Doe	The ability a business has to be flexible and continuously adapt to new situations	Canadian Business Review
1997, 1998	Horne; Horne y Orr	Fundamental quality of a company that responds productively and significantly to change.	Employment Relations Today; Business Forum
1998	Mallak	The individual quality of the companies that face some difficulties and return to their original position.	Industrial Management

Table 1Definitions on resilience in the field of business management

1999	Weick et al.	A company's ability to recover in the presence of adverse events.	Research in Organizational Behavior
1999	Edmondson	Capability to maintain functions and results in the middle of tension.	Administrative Science Quarterly
2000	Robb	The individual quality of the companies that face some difficulties and return to their original position.	OD Practitioner
2000	Minolli	Business' capacity to absorb changes and disruptions.	UCEMA
2001	Balu.	The individual quality of the companies that face some difficulties and return to their original position.	Fast Company
2002	Coutu	The ability and capacity to be strong in times of stress and change	Harvard Business Review
2002	Dutton Rudolph y Repenning	The individual quality of the companies that face some difficulties and return to their original position.	Harvard Business Review Administrative Science Quarterly
2003	Hamel y Välikangas	Ability for permanent reconstruction.	Harvard Business Review
2003	Sutcliffe y Vogus	The individual quality of the companies that face some difficulties and return to their original position.	Positive Organizational Scholarship: Foundations of a New Discipline
2004	Starr et al.	Skill and ability to withstand systemic discontinuities and adapt to new environments at risk.	Strategy+Business
2005	Reinmoeller y Van Baardwijk	Ability for self-renewal in time through innovation.	MIT Sloan Management Review
2005, 2009	Lengnick-Hall y Beck	The company's future capacity to absorb, respond to, and take advantage of the difficulties generated by changes in the environment.	Journal of Management: Resilience Engineering Perspectives
2006	Gallopin	Adaptive capacity of the company.	Global Environmental Change
2006	Gittell et al.	The individual quality of the companies that face some difficulties and return to their original position.	Journal of Applied Behavioral Science
2006	Fiskel	Company's ability to survive, adapt and grow in the face of turbulent change.	Sustainability: Science, Practice, and Policy

2008	McManus	The search of opportunities during a crisis in order to emerge stronger and in better conditions to those prevailing before the critical fact.	Universidad de Cantenburry
2009	McCann et al.	The ability to resist, absorb, respond and reinvent itself if required in response to the rapid and continuous changes of the environment.	People & Strategy
2009	Madni y Jackson	Capacity to anticipate a disturbance, to resist by adapting or recovery through the restoration of the pre-disturbance state as much as possible.	IEEE Systems Journal
2010	Erol et al.	Organization's capability to reduce the vulnerability, ability to change and adapt as well as the ability to recover quickly from unforeseen events.	Enterprise Information Systems
2010	Bégin y Chabaud	Ability to recover from the unexpected.	Revue Française de Gestion
2011	Juettner and Maklan	"It is proposed that the resilience of value chain is defined by four (4) skills: flexibility, fast reaction speed, timely access to information and collaboration between members of the value chain".	
2012	Medina	Resilience expresses the ability of an organization or of its parts to quickly respond to uncertainty.	Gestión y Estrategia
2011	Lengnick-Hall, C. A., Beck, T. E., & Lengnick- Hall.	The firm's ability to effectively absorb, develop situation-specific responses to and ultimately engage in transformative activities to capitalize on disruptive surprises that potentially threaten organization survival.	Human Resource Management Review
2016	Annarelli and Nonino	The capability to foresee disruptions and unexpected events due to the strategic awareness and a linked operational management of internal and external shocks.	Omega
2017	Lei XIAO, Huan CAO	Organization's ability to restore to its original state or even develop a new skill in disruptive conditions.	ITM Web of Conferences
2018	Ruiz-Martin, López-Paredes and Wainer	Resilience, at the organizational level, is the measurable combination of characteristics, abilities, capacities or capabilities that allows an organization to withstand known and unknown disturbances and still survive.	International Journal of Production Management and Engineering

# 3. Methodology

The investigation consists fundamentally of an interview with the president of AIA, and field research of the company as well as all the documents provided willingly by the company to assure not one missing detail. Given that this is a case study, which is one of the most used research strategies, the type of research is exploratory. This is done when there is little reference to a topic or possibly an insufficient number of studies on a particular subject, specifically resilience in the organizational discipline. It aims to study a particular case in depth rather than several to determine and link resilience and dynamic capability together. It is with only one case that one can more clearly demonstrate and test a hypothesis without a doubt. It will be manifested in a deductive way starting from two general theories and then specifying a particular situation as is the case of the company AIA, the subject of study.

This research will not have numerical data to be studied other than limited financial statements to demonstrate insolvency during its crisis. Neither will there be a proposal of a complete design or anything as a matter of fact, and that is why the purpose of the case study will have qualitative and non-quantitative characteristics. It will seek the interpretation and presentation of findings in a subjective way through the examination and reflection of "soft" aspects such as behaviors, attitudes, culture and values. Looking exclusively for mistakes in direction any employee including the president of the company may have missed or made to begin travelling the long road down they found themselves riding through to end up in the deep hole they are presently getting out of.

A qualitative research will be carried out in which a hypothesis is presented, and concepts and variables are interrelated that must be validated with appropriate methods or researched support. This will be developed at a perceptual level where not only an attempt will be made to make an exploration and description of the terms resilience, business resilience and dynamic capability but also of the case of the AIA construction company. For this purpose, a key objective is to describe the above-mentioned in order to find a solution to methodological questions, how is it, who are they, how many are there? This case study will attempt to demonstrate through theoretical investigation and field research that business resilience as a dynamic capability can help a company overcome an extreme adversity, so it can further be proposed as a strategy for increasing Colombia´s business longevity.

Through a case study, qualitative research is made possible by conducting a series of interviews, by reviewing life stories, personal reflections and other elements of support both written and visual. This material that will be used to carry out the research that aims to study both the essential terms of this thesis and the case that will be available to exemplify and revise, possibly even to propose the use of both concepts. This research will begin by studying the terminology described above, then a contextualization of the case of AIA will be done, after which both errors and success factors will be studied and finally possible links between the terms and the case will be identified.

The fundamental tool in order to carry out a case study is the collection of data obtained or researched that guides a complete and precise investigation. Without the information, there will be no way to identify and evaluate the problem evidenced in the investigation and this is why the most successful way to achieve such assessment is to build an interview. It is important to clarify that the interview should be handled professionally, in a formal and open way to collect as much information as possible. Beforehand it was important to know how much the company or even if the company was willing to provide all the information available without hesitation whatsoever. Additionally, the technique and manner in which the questionnaire is carried out is crucial to take advantage of the knowledge of who is doing this. Taking into account that this is a direct contact between interviewer - interviewee, it should be communicated in a kind, clear and simple way to allow both participants to open up in a conversation and even a discussion that leads to a smoother dialogue and facilitates the obtaining of information in more detail and rigor.

The questionnaire will be done previously by the research student (one of the authors of this article as well) who will proceed to schedule an appointment with the president to date of the company in subject and have a month internship to further the experience and closely watch how the internal operation is working -a due diligence if you will- for further exploration and verify that an outsiders' perspective is also taken into account. These appointments will have a sole purpose which is to ask such questions and be answered accordingly. The central theme being, how did the company deal with the crisis? And, what are they doing differently today? Leading the interview to sub-themes such as: how the operational figure looks like, financial statements, employee backgrounds and the company's mission and vision, in order to have a certain context and observe the company's credentials.

AIA was selected as the specific case to study for variously important reasons, it is not only one of the most important in its field but has had the misfortune to encounter a crisis many companies would have not survived through, even though they have not fully recovered, an improvement can be perceived in their all-around situation for they have developed an enduring plan with a coherent strategy and optimistic attitude. Another one of the main reasons being its trajectory in the construction market and overall status, which denotes how even the largest and most successful organizations can someday encounter problems that may terminate their streak. Size and market share does not guarantee permanence, as a matter of fact every company, large or small, has a risk.

# 4. Empirical Research

Company Overview: AIA (Architects and Associate Engineers) is chosen because it goes through the three moments of business resilience, being a clear example of how organizations in Colombia fail but can recover.

This architectural and construction firm was founded in 1949 by an architect and an engineer. From the beginning it has had an architecture departament and construction deparment, the two largest of the organization. AIA does not do any project management but instead have been dedicated to construction for third parties, specifically civil infrastructure work such as bridges, tunnels, hydroelectric power plants, water treatment plants, etc. The company does as much civil work as commercial and focuses on buildings, eg. housing, commerce, institutional, industrial, with the exception of roads. Construction for third parties is where the largest turnover of this company comes from, the Matelsa Corporate Building is one of their most important projects.

The architecture department of AIA is one of the largest in the country and the most important in terms of institutional architecture, with more than 50 architects, where their strength are hotels, offices, institutional buildings and also housing. The construction department can have as much as 20 projects at a time while the architecture department works with 60-70 or so projects simultaneously, most of them for third parties as well. During their many years of operation these two departments have been constantly growing, eventhough the company has not ventured yet into own projects. They have great strength in technical and structural elaboration, unlike many others in Colombia as is the case of CDO who made enourmous technical errors, starting with Space (the first residential building to collapse). Curiously, despite being one of the largest and most important in the country, it's not as profitable as others that may not be as large and have such a trajectory. Here's why:

Moment		Moment	Description
	1	Before Crisis	In 2010 the company invested in a group called Felguera with whom they planned on working with on several endeavors. Unfortunetely, Felguera was a miss lead opportunity and cost them a large sum of money. To futher explain this incident, no disbursements were made on behalf of Felguera once one of the projects was close to finishing and this forced AIA to pay instead so it could be completed leaving them with no cash flow. This

Table 2

		business deal turned out to be a scam.
		The company's goals for an extended period of time (mission and vision) named Mega Goal in this case was reformulated in 2011, its new target was to double its income by 2015 -a 4 year period- for a total of \$500.000 million pesos when up to 2011 it had only been as large as \$200.000 million pesos. Unrealistic and unreachable for any company, especially one that had been recently illiquid.
		Afterwards the company entered into a partnership outside the business where they started to build apartments in Sabaneta and other sectors of Medellín and it turned out that the project income was being managed by the partner and much of the that went into buying other lands for other future projects without the AIA endorsement.
		Additionally, with their impeccable credit scores and positive reputation, AIA had won over all of national banks trust allowng them to pursue loans with no hesitation. By 2012 the company had taken out small term loans with over 10 banks in Colombia, mainly to invest and/or partake in projects they had been interested in. There is a thin line between searching for financial aid and relying on a third party for monetary support. To search for financial aid is to endow your company with a specific amount of capital that is needed to subsidize a particular project or resolve certain issues. Relying on a third party for monetary support on the other hand, is to enable the company 's entire functionality that otherwise would not be possible unless an external entity assists economically. This explains one of the main reasons why AIA found itself trying to pay off an immense amount of debt that lead them to drown in interests they could not afford.
2	During Crisis	<ul><li>When the crisis arrived, AIA was forced to take drastic measures starting by restructuring the company internally with the most important change in its beginning that was the replacement of its president because he has the final decisión over any other person.</li><li>Andrés Bejarano, current president of AIA entered the company in May of 2014 and had to face a very difficult financial situation because the company was indebted to the point</li></ul>
		that they would be filing for bankruptcy. Upon his entrance, Andrés was confronted with a monster crisis which he accepted optimistically viewing it as an opportunity to grow it and found it to be an interesting challenge that above all would bring great learning experiences and in case of being successful in the attempt to save the company, professional success. This was not the only change that was made within the company since not only the president but each employee in the organization contributes to the success or failure of any organization, but it was the beginning of the third moment that was the overcoming of the crisis.
		The focus during this moment was to stay afloat while the restructuring of the company was being executed and new strategies lead by Andres were being engineered.
3	After Crisis	One of the new strategies proposed by Andres was to get away from an exorbitant amount of businesses' that did not bring rapid investment returns or a very low margin of profit to avoid unnecessary efforts at the critical moment in which they found themselves in. Thinking this time not only in the amount of business they had to establish but rather focusing on quality to reduce the risk of loss and increase cash flow, thus paying off interests on bank loans to lower them every time more and more.
		Then, accompanied by a very good firm called <i>Strategy in Action</i> , renegotiated the debt which means that they took the debt and changed due dates with the banks to pay the 65% of it called Tranche A of the debt extended to 8 years making it sustainable for the company and reducing stress and pressure. The other 35% called Tranche B is being paid off with sales of unproductive assets (lots that are not producing, projects which
		rotate slowly), in other words getting rid of the inventory that is, after all, a liability and not an asset for the company.
		Finally, Andres would reduce the Mega Goals to half of what was initially suggested for

# 5. Results

After analyzing both sides of this investigation it is relevant to note the importance of a well conformed team that ultimately constitutes an organization because every person contributes or lessens the performance or even potential of the company, especially high executives as is the president in the case of AIA who –not undermining his abilities-committed mistakes that lead his company to its crisis. As Marcus Lemonis the expert on reforming businesses says, "the most vital parts of an organization are people, process and product", so the people part of AIA definitely needed help and it showed with the improved direction Andrés Bejarano gave to the company, establishing a concise but accurate plan for them to get out of their ongoing crisis and with great patience since he understands this line of work takes even more time than most. People have the company's future in their hands as they not only take care of its process but also can better the product/service.

The product is sublime, nonetheless they were overly confident in what they offered and chose to embark on every business opportunity handed to them without fully analyzing them. This lead to low margin profit projects that consumed much more time and gave them much less money, as well as increasing the risk for failure and investment loss. Instead of venturing into eye catching projects that had no financial projection analysis and lacked further investigation, AIA should have taken cautious steps and further evaluation to determine which project was more suitable, searching for ones that would excel and generate profit, this gives them greater rotation and a faster return on investment. Another factor that contributes to having a good product is to define and outline it correctly, to know the market, to know what they are good at and stick to it, without deviating just for obtaining greater illusory profits. In the case of AIA, one mistake was to leave aside the idea of developing their own projects (knowing also that they have the capacity and ability to do so) for the ease of developing third party projects to save time and to avoid investing as much money for it does not depend 100% on them. Not all businesses of course leave a high profit margin, much less are they all the same but there are ways to ensure the greatest margin possible, and this is made possible by having a good process (increasing efficiency in the operation is one of the common ways of achieving this). The process had some failures as well, there were no supervisors during the execution of each project and internal operations, and therefore forced them to lose money on some of them.

Organization was another problem they faced as there was no universal strategy, just all over investments with no basis, taking cash out of the company's own pocket to invest in projects that were not properly studied. In construction, each project has its own cash reserve where no one is allowed to use the money out of them and should wait for the breaking even point before beginning the actual construction, at least that is what is usually done to avoid risk. That was the main issue with some of the projects done by AIA, not using this method and confusing cash reserves between projects or in other words using a centralized cash reserve rather than individual ones, that does not allow the manager to track its source and profits made. Money organization is just a part of the whole organization topic, not only is it important in accounting but in every company position as well bringing order.



"Every company that has ever been resilient has made investments in R+D" (Diana Clarke. 2014), and although it is true that innovation, insertion and enhancement of products/services is vital for the organizations overall improvement and adaptation to environmental change as well as continuous survival, the prevention of threats can further increase the chances of the company's subsistence. To explain the previous Design Proposal, the suggestion is to include a new area in a company that studies resilience as a dynamic capability, so companies can concentrate on how to avoid crisis and not only study how to better their actual selves.

This would be a huge complement for businesses as they would have a plan to face future threats focusing on the two major divisions:

- 1. Prevention (what are potential threats and how to possibly avoid them)
- 2. Correction (how to overcome those threats once they affect the company)

By adding this to the daily operational chain of the company, they can have the tranquility of eliminating uncertainty and can be ready to encounter problems which will eventually appear. Time is also an important factor that would not be wasted as having this resolved beforehand will allow the company to focus on daily tasks and other crucial duties.

# 6. Conclusions

Resilience originated as a physics concept and transitioned into other disciplines such as phycology and biology, leading to its newest vicissitude in business and management. This concept is fairly new in the study of organizations as it was introduced only four decades ago, specifically as a business's dynamic capability to overcome a dire situation with great success that would otherwise put its existence at risk. This article displayed a direct association between the business resilience concept and dynamic capabilities, while reviewing 3 crucial moments a turbulent company endures and has to overcome in order to be resilient. The first moment exposes what the company did before it fell into its critical situation, determining the fundamental causes that would lead them to the second moment. The moment of crisis, secondly, displays how the company functioned and consequently acted during the impasse making way to the third and final moment which exhibits the company's strategies to surpass the crisis and what they are currently executing for it to be successful. It is being presented in the form of a case study of the Colombian construction company AIA with a qualitative methodology. With the above, I want to share with the scientific community the findings that will explain how theories of dynamic capability and resilience could be a strategy for business recovery. Primarily it is desired to ensure a worthy analysis that can show entrepreneurs, businesspersons, and others who may be interested in organizational studies that this subject which has not been fully investigated and therefore has no complete development, can be a possible solution to the immense problem that has become the lack of business longevity in Colombia. Thus, the final results reflect what an organization must not do and thus should do in order to use this powerful dynamic

capability better known as resilience to stay in or get to a number one spot in the market. This investigation leads to the development of a new area in an organization that focuses solely on analyzing what could be possible threats to the company, preparing for (if possible) and then designing a contingency plan to avoid crisis ' in the near or distant future as well as embracing them to become even greater. In précis, Resilience as an area in an organization should be as important as R+D, not only to excel in a market space but all together extend life expectancy.

# **Bibliographic references**

Ansoff, I. (1969). Business Strategy. Middlesex: Penguin Books.

Bhamra, R., Dani, S., Burnard, K. (2011). Resilience: the concept, a literature review and future directions. International Journal of Production Research, 49(18), 5375–5393.

Caldart, A., & Ricart, J. (2006). A Formal Evaluation of the Performance of Different Corporate Styles in Stable and turbulent Environments. Barcelona, Spain: IESE Business School- University of Navarra.

Coutu, D.L. (2002). How resilience works. Harvard Business Review, 80(5), pp. 4655 Doe, P.J. (1994). Creating a resilient organization. Canadian Business Review, 21(2), pp. 22-27.

Edmondson, A. (1999). Psychological safety and learning behavior in work teams. Administrative Science Quarterly, 44(2), pp. 350383

Eisenhardt, K. M. y Martin, J. A. 2000, "Dynamic capabilities: What are they?", Strategic Management Journal, vol. 21, no. 10-11, pp. 1105-1121.

Emery, F., & Trist, E. (1965). The Causal Texture of Organizational Environments. Human Relations, 18 (21), 21-32.

Erol, O., Sauser, B.J. and Mansouri, M. (2010) A Framework for Investigation into Extended Enterprise Resilience. Enterprise Information Systems, 4, 111-136.

Freeman, S; Hirschhorn, L and Maltz, M (2003). Moral Purpose and Organizational Resilience: Sandler O'Neill & Partners, L.P. in the Aftermath of September 11, 2001. Academy of Management Best Papers.

García-Merino, T., Rivera, H. A. R., & Santos-Álvarez, V. (2015, September). The Development of the Concept of Business Resilience: A Qualitative Analysis of the Baiona Barnacle Collectors' Case. In Forum Qualitative Sozialforschung/Forum: Qualitative Social Research (Vol. 16, No. 3)

Grant, R. (2003). Strategic Planning in a Turbulent Environment: Evidence from Oil Majors. Strategic Management Journal, 24, 491-517.

Gueguen, G. (1997). Face aux turbulences, l'entreprise doit-elle être réactive? Propos de réflexion. VIème conférence de l'AIMS. Montreal: HEC.

Gittell, J; Cameron, K; Lim, S; Rivas, V. (2005). Relationships, Layoffs, and Organizational Resilience: Airline Industry Responses to September 11, EERI Research Paper Series, No. 6/2005, Economics and Econometrics Research Institute (EERI), Brussels.

Hamel, G. & Välikangas, L. (2003). The quest for resilience. Harvard Business Review, 81, pp. 5265.

Horne, J. & Orr, J. (1998). Assessing behaviors that create resilient organizations. Employment Relations Today, 24(4), pp. 2939.

Lengnick-Hall, C. A., Beck, T. E. (2005). Adaptive fit versus robust transformation: How organizations respond to environmental change. Journal of Management, 31(5), 738–757.

Lengnick-Hall, C. A., Beck, T. E., Lengnick-Hall, M. L. (2011). Developing a capacity for organizational resilience through strategic human resource management. Human Resource Management Review, 21(3), 243–255.

Linnenluecke, M (2017). Resilience in Business and Management Research: A Review of Influential Publications and a Research Agenda. International Journal of Management

Reviews 19(4):4-30

McCann, J., & Selsky, J. (1984). Hyperturbulence and the Emergence of Type 5 Environments. Academy of Management Review, 9 (3), 460-470.

Reinmoeller, P & Van BaardwiJK, N (2005). The Link between Diversity and Resilience. MIT Sloan Management Review, 46(4): 61-65.

Rudolph, W; & Repenning, N. (2002). Disaster dynamics: understanding the role of quantity in organizational collapse," Administrative Science Quarterly, 47:1-30

Ruiz-Martin, C, Lopez-Paredes, A & Wainer, G. (2018). What we know and do not know about organizational resilience. International Journal of Production Management and Engineering, 6(1): 11-28.

Starr, R., Newfrock, J., Delurey, M. (2003). Enterprise Resilience: Managing Risk in the Networked Economy. Strategy and Business, 30, 70–79.

Staw, B; Sandelands, L & Dutton, J. (1981). Threat rigidity effects in organizational behavior: a multi-level analysis," Administrative Science Quarterly, vol. 26, pp. 501-524.

Sutcliffe, K and Vogus, T (2003). Organizing for Resilience by Chapter 7 of Positive Organizational Scholarship (San Francisco: Berrett-Koehler). Cameron, K., Dutton, J.E., & Quinn, R.E. (eds.)

Teece, D. J., Pisano, G., y Shuen, A. 1997, Dynamic capabilities and strategic management, Strategic Management Journal, vol. 18, no. 7, pp. 509-533.

Terreberry, S. (1968). The Evolution of Organizational environments. Administrative Science Quarterly , 12, 590-613.

Weick, K.E. (1993). The collapse of sensemaking in organizations: the Mann Gulch disaster. Administrative Science Quarterly 38: 628-652. (1995) Sensemaking in Organizations. Thousand Oaks, CA: Sage

Weik, K.; Sutcliffe, K. & Obstfirld, D. (1999). Organizing for high reliability: Processes of collective mindfulness. Research in Organizational Behavior, 21, pp. 2381. WILDAVSKY, A. (1988). Searching for safety (Vol. 10). New Brunswick, NJ: Transaction publishers.

Wildavsky, A (1988). Searching for safety. New Brunswick, NJ: Transaction Books.

Worline, M. C., Dutton, J. E., Frost, P. J., Kanov, J., & Maitlis, S. (2003). Creating fertile soil: The organizing dynamics of resilience. Working paper, University of Michigan Business School

Xiao, L; Cao, H (2017). Organizational Resilience: The Theoretical Model and Research Implication. ITM Web of Conferences., 12 (2017) 04021.

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