



Correlation Analysis of Educative Experience and Finances in the Business Entrepreneurship in Baja California, Mexico

Ismael Mata Bojórquez¹, Juan Gabriel López Hernández¹, Elsie Adelina Antonio Miranda², Leslie Viridiana Pérez García³, Diana Guadalupe Jalapa Ruiz³, Martin Humberto Llamas Haro⁴, Rafael Mares Coria⁵, José Luis Ruvalcaba Rivera⁶, Armando Ricalde Moreno⁶, Gustavo López Badilla⁶, Alejandro Márquez Romero⁷, Roberto García², Eladio Naveja Farías⁸, Gerardo Botello Juárez⁹, Miguel Orellana López⁹, Angela Princesa Amador Salcedo⁶, Janeth Adriana Pulido Hernández⁶, Maria Guadalupe Gaspar Contreras¹⁰, Brenda Luz Rodríguez Gerardo¹⁰, Andrea Romo Vargas⁶

¹Departamento de Ciencias Básicas, Centro de Bachillerato Tecnológico Agropecuario No. 146, San Quintín, Baja California, Mexico.

²Facultad de Contabilidad y Administración, Universidad Autónoma de Baja California, Tijuana, Baja California, México.

³Departamento de Ciencias Básicas, Instituto Metropolitano de Tijuana, Tijuana, Baja California, México.

⁴Departamento de Investigación y Posgrado, Universidad Vasconcelos, Campus Río, Tijuana, Baja California, México.

⁵Departamento de Control Escolar de Universidad, Universidad Vasconcelos, Campus Río, Tijuana, Baja California, México.

⁶Departamento de Ciencias Avanzadas, Universidad Vasconcelos Campus Murua, Tijuana, Baja California, México.

⁷Departamento de Educación, Universidad Vasconcelos, Campus Río, Tijuana, Baja California, México.

⁸Departamento de Ciencias Básicas, Colegio Alemán Cuauhtémoc Hank, Tijuana, Baja California, México.

⁹Departamento de Ciencias Básicas, Instituto Internacional para el Desarrollo Empresarial-INIDE, Tijuana, Baja California, México.

¹⁰Componente Profesional Licenciatura en Contaduría, CETIS 75, Mexicali, Baja California, México.

Abstract – Entrepreneurship development is very important to the economy of every region in the world. This relevant activity is of great interest in the field of finance, which involves the management of human, material, and economic resources. Great entrepreneurs face significant challenges and must have knowledge in finance to control the processes of the business activity they wish to develop. Financial management is of great support to achieving success for both industrial and commercial companies. In every entrepreneurial activity, relevant aspects related to finance must be considered, such as planning and budgeting, cost control, cash flow, financing and capital, and financial analysis; each of which has its role to ensure the optimal development of the business. Furthermore, entrepreneurs must have knowledge of educational finance, financial tools, adequate staff hiring, constant monitoring of entrepreneurial and business activities, and always be prepared for unexpected factors that can generate imbalances in the entrepreneurial enterprise. In this research analysis, an evaluation was conducted in three cities in the state of Baja California, the most important in this region of the Mexican Republic: Ensenada, Mexicali, and Tijuana.



Surveys were conducted on the entrepreneurial process and its relationship to finance. The research was conducted from January to June 2025, yielding significant results.

Keywords: Entrepreneurship, Finance, Industrial and Commercial Companies.

1. INTRODUCTION

Entrepreneurship is a relevant action that can generate diverse types of activities, which are related to technology, education and finance actions, which are very important in the beginning, development, monitoring and sustaining small businesses, which subsequently grow and develop into large companies (Afandi M. et al, 2021). Entrepreneurship can be related to a great adventure, where challenges and limitations arise, which can generate events that could lead to support actions or, at times, could cause critical situations and lead to bankruptcy for entrepreneurial companies (Cedillo et al, 2018). The educational activities are very relevant in the generation of emotional intelligence of students, which can be provided by the teachers in different topics and universities, colleges and research institutes (SE, 2025). In a lot of actions of educational activities, it is necessary to stimulate this important factor in students of university and research functions levels, to approach the knowledgements and originate the entrepreneurship, and motivate to create new business that contributes to the economy of each region in the world. The entrepreneurship is a relevant action in the economic activities that generates employments and enriches the economy of population (Kim et al, 2022).

2. ENTREPRENEURSHIP ACTIVITIES

This relevant function can have a positive effect in the economy of persons, which some entrepreneurs support to generate employments. The term provides of the French language that derives from the Latin, which means "attempt" and "try" anything that you want to do, and is focused to people that approach their abilities and knowledgements to develop any type of business (Vargas et al, 2017). Actually, this interesting action is referred to start a new business that detects a necessity, and can support to this necessity, to improve any activity in the life. The entrepreneurship has a lot of challenges and must be overcome, which in some times can be risks that can finish in rewards, with the attract of customers and generate economical gains. An entrepreneur has abilities of arts, science, technology and engineering to first detect the necessity, then develop the business, which in some cases, entrepreneurs have the economical support to start the business. In other cases, entrepreneurs, must be supported with economical action, by government plans to entrepreneurs, and also, can be supported by people of startup interested in investing in entrepreneurship with new businesses (Kayaci, 2021).

2.1 Entrepreneurship relevant factors

This important activity starts with the idea of developing a new startup that is based in the detection of a necessity, where there can exist diverse types of reasons to begin a startup, which could have relevant characteristics as are expressed now, and related with figure 1 (Abdeljaber O. et al, 2021):

- a) The entrepreneurship can have hard relation with risks and challenges that be solved very fast.
- b) Sometimes will be satisfactions and frustrations.
- c) When a business begins, it need time to progress.
- d) All type of startups needs creativity, flexibility and imagination to develop the idea.

e) The business need steps to progress as mentioned next: (1) planning, organization and management of all resources (economical, human and materials).

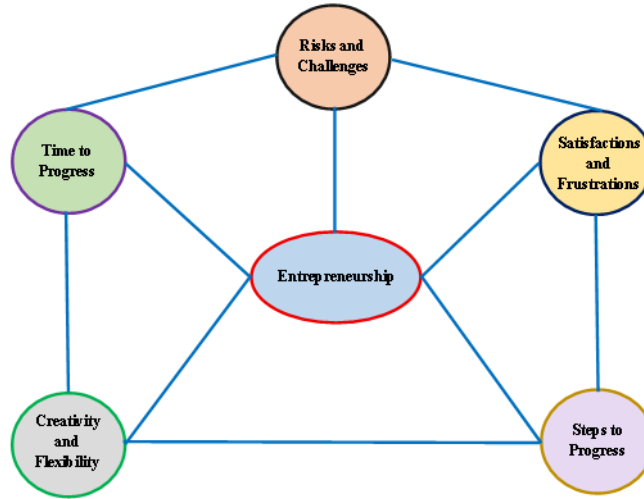


Fig -1: Main characteristics of the entrepreneurship
Source: Analysis of the investigation

Figure 1 shows the principal factors of the entrepreneurship, which were mentioned above that the main aspect is the risks and challenges, followed to the satisfactions and frustrations of entrepreneurs, and the business gain reliability of the ideas to create new business (García-Macías M. et al, 2018). Some relevant factors that faced the entrepreneurs are when works alone, because the entrepreneurs need elaborates some activities together with networks and alliances, to improve the new startups. For this reason, is necessary, evaluate the main challenges of the entrepreneurs, as are mentioned in the next table (Doran J. et al, 2018):

Table -1: Principal challenges of entrepreneurship

Characteristics	Concepts
Challenges	
Economical resource scarcity	Are very important, because when are scarcity, is very difficult to elaborates the activities of the new startups, and sometimes, the operative yielding of the any startup tend to low, and with this, the sales not will be good, and the startup can download and close. When the entrepreneurs, can solve this critical situation, the startups will improve and can growth very fast.
Realization of multitasks	This can be difficult, because in the begin of the startups, the majorly of the tasks are elaborated by few people, and are very hard to employments of the startups.
Lack of funding	The scarcity of economic resources to begin or growth any type of startup, can results difficult to that the startups following growing and be a great company.
Inflationary economy	Considers the increase of prices and costs of the basic and other types of services and commercial products, in accord of the economy of each region of

	the world or country.
Price competitiveness	Is referred to the competitiveness of prices between commercial and industrial companies, based on supply and demand of commercial and industrial products.
Changes in economic policies	Are generated by each government of a country of region of any country, where the economic policies, are determined by the supply and demand in internal commercial and industrial activities of each country, in commercial trades between countries (external commercial and industrial activities) and type of taxes regulated by each country or region of countries or between of countries.
Increase of taxes	Are determined by the supply and demand of commercial and industrial products, where are regulated by the economy sector of each government un any country or region of countries.

Source: Analysis of the investigation

Table 1 illustrates the main challenges, which are presented in the entrepreneurship actions, and with the factors that entrepreneurs debit considers to begin a new startup and reach a good growth adequately. The principal factor can be considered the economical resource scarcity, which is very important to finance the operations of the new startups.

3. ECONOMIC FACTORS

Is referred to obtain the investment and the way to manage economic, human and material resources, to begins a new startup or maintain or growth of startups stablished (Giambra S. et al, 2021). This is very relevant in the operation of any type of business, reached in sometimes by the entrepreneurship action. The economic factors are focused to important aspects as consumption of commercial and industrial products and services, production and distribution of services or commercial and industrial products, involving the resources access, employment opportunities and levels, government policies, supply and demand and inflation. These parameters of interesting, can are relevant in the optimal development of startups as entrepreneurship action, to determine the level of economy in any region of the world, and countries. The information mentioned above is represented in table 2 (Vargas et al, 2017).

Table -2: Economic factors of the entrepreneurship

Characteristics	Relevant Aspects
Economic Factors	
Consumption of commercial and industrial products and services	Is referred to the percentage levels of consumption of the commercial and industrial products and services in any region of the world, where is considers the productivity and quality indices.
Production and distribution of services and industrial and commercial products	Is evaluated with the goal of reaching customers quickly and easily, in order to obtain the necessary sales to sustain both newly started and established businesses.
Parameters Involved	

Resources access	Are presented as the economic, human and material resources necessary to the operations of a new startup or startups established, to generates the services and commercial and industrial products.
Employment opportunities and levels	The development of startups, can generates employments and contributes to the economy of each region of the world.
Government policies	Are developed in accord to the government actions with respect of the economy of each country or region of the world, and depending of the supply and demand.
Supply and demand	Is referred of the necessity and demand of the services and commercial and industrial products in each zone of the world, originating the competitivities, prices and distribution.
Inflation	Represents the action of the economical factors as supply and demand, where are involved the productivity and quality services and commercial and industrial products.

Source: Analysis of the investigation

3.1 Baja California State economy

This region is a great economic zone of the Mexican Republic, where is approached the Commercial Agreement Trade (CAT), between Canada, Mexico and United States, and other international trades of Mexico with other countries, where actually have an important relation with China, which participates with a high level of the economical worldwide (Martínez M. et al, 2022). This state has high contribution in the Gross Domestic Product (GDP) in Mexico, being evaluated its economy in the eight cities of Baja California State (Ensenada, Playas de Tijuana, Mexicali, Rosarito, San Felipe, San Quintin, Tecate, Tijuana); where Ensenada, Mexicali, Tecate and Tijuana, are the principal cities that are represented in table 3, with the services, commercial and industrial activities (SE, 2025).

Table -3: Activities in the cities of the Baja California State (2025)

City	Activity	City	Activity
Ensenada	Services and Commercial and Industrial Operations	San Felipe	Services, Fishing and Commercial Operations
Playas de Tijuana	Services and Commercial Operations	San Quintin	Services, Agricultural, Fishing and Commercial Operations
Mexicali	Services and Agricultural, Commercial, Industrial and Livestock Operations	Tecate	Services and Commercial and Industrial Operations
Rosarito	Services and Commercial Operations	Tijuana	Services and Agricultural, Commercial, Industrial and Livestock Operations

Source: Analysis of the investigation

Table 3 illustrates the eight cities of the Baja California State, and the main activities that represents economy of each city, and the opportunities of employment to the population of each region of this relevant state,

which have a lot relation with the California State of United States, which state represents an important factor in the economy of United States.

4. METHODOLOGY

This investigation was reflected important information, where were made relevant activities that are expressed now:

- a) Analysis of the develop new startups and the startups established in the Baja California State.
- b) Evaluation of the entrepreneurship action in the teaching-learning process.
- c) Analysis of the main factors that have an effect in the entrepreneurship action to increase the economy of this region of the Mexican Republic.

5. RESULTS

The information obtained in this scientific study is very important, where is expressed in the next sections, to determine the principal factors necessary to stimulate to students, youngsters or each age, to develop new startups or maintain and growth the startups established.

5.1 Evaluation of new startups and the startups established in the Baja California

In this investigation was made an analysis of the creation and development of new startups, and startups with one to two years of the begin of this commercial business as restaurants, food markets and other type of activities, which are showed n table 4.

Table -4: Analysis of the Startups in Baja California State (2023-2024)

City	Startups, Years From Begin					City	Startups, Years From Begin				
	1	2	2	1	2		2	2	1	1	2
Ensenada	A					Mexicali	A				
Ensenada		B				Tijuana		C			
Ensenada			B			Tijuana			C		
Mexicali				C		Tijuana				B	
Mexicali					A	Tijuana					B

1, 2, 3. Restaurants, 4, 5, 6. Food Market, 7, 8, 9, 10. Clothes Market

A. Low Economic Progress, B. Medium Economic Progress, C. High Economic Progress

Table 4 shows the progress levels of ten startups located in the three principal cities of the Baja California State, where was observe that in two years of this evaluation, was illustrated that these startups analyzed, three were high economic progress, four were medium economic progress and three were low economic progress. This was very relevant, because in the ten startups evaluated, were analyzed the five important factors of figure 5, and the sixth factor was the resilience, which means the resistance to bad times as economic aspects, representing low sales. For this reason, was evaluate and represented in a graph, a new

startup, which was began in January to December of 2024 that was showing the process progress level in 2024.

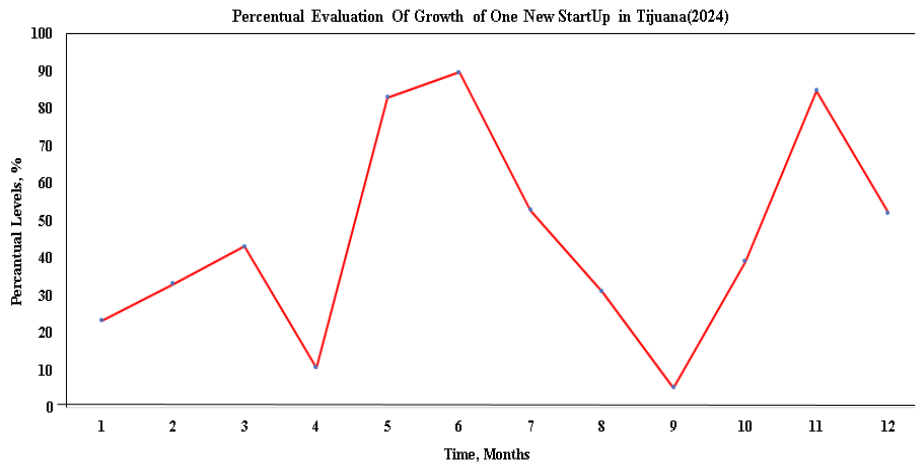


Fig -2: Analysis of progress level of a startup located in Tijuana (2024).

As is showed in figure 1, is represented the economic progress level, which is observed in the first three months were illustrated low economic progress level, and in the four month was the more low economic progress level/ Also, in the five and six months, was the high economic progress level, and from seven to nine months, was decreased it, to increase again from ten to eleven months, and decrease a little in the twelve month.

5.2 Analysis of the entrepreneurship and relation with teaching-learning process

This part of this scientific study, means that was evaluated of ten new startups installed in the three principal cities of the Baja California State, where was illustrated the analysis of the startups initiated in three types of educative institutions: a university, a technological institute and a high school, which were supported to the students to elaborates the startups. Experts in the entrepreneurship, generating knowledge and the application practice, to generates the startups. Table 4 shows the ten startups, and the progress level in the three cities evaluated, observing that 1,1 (Startup 1 developed in the university), 6,2 (Startup developed in the Technological Institute and 9,3 Startup 9 developed in a high school). Also, was presented the progress level with the B and C level, which means that startups were progressed in the economic aspect, in the 2024.

Table -4: Relation analysis of scholar knowledgements and startups progress levels (2023-2024)

City	Universities, Startups					City	Universities, Startups				
	1,1	2,1	3,1	4,1	5,1		6,2	7,2	8,2	9,3	10,3
Ensenada	C					Mexicali	B				
Ensenada		C				Tijuana		C			
Ensenada			B			Tijuana			C		
Mexicali				C		Tijuana				B	
Mexicali					C	Tijuana					B

1. University, 2. Technologic Institute,3. High school

A. Low Economic Progress, B. Medium Economic Progress, C. High Economic Progress

5.3 Evaluation of principal factors of entrepreneurship in Baja California

This part of the scientific study, presents the analysis of five startups developed in 2023 and evaluated from 2023 to 2024, and be analyzed the progress level in these two years. This means that these startups were evaluated by the five principal factors of the entrepreneurship, showing the progress level in each startup and the entrepreneurship factors.

Table -5: Evaluation of the entrepreneurship factors in startups (2023-2024)

Factors	Startups				
	1	2	3	4	5
Risks and Challenges	C				
Satisfactions and Frustrations		C			
Steps to Progress			B		
Creativity and Flexibility				C	
Time to Progress					C

1, 2, 3, 4, 5, 6. Universities, 7, 8. Technologic Institutes, 9, 10. High schools

A. Low Economic Progress, B. Medium Economic Progress, C. High Economic Progress

6. CONCLUSIONS

This investigation was generated relevant information that was approached by the entrepreneurs of this important region of the Mexican Republic that generates good contribution of the Gross Domestic Product of Mexico. The evaluation of entrepreneurship in this zone of our country, have a relevant role, which is based on the participation of the educative institutions to develop startups, and generates new employments to people in this region of the Mexican Republic, and contributes to the economy. This was very interesting, because it can influence in the generation of the ideas of youngers as students of the university, technological institute and a high school of the three cities evaluated.

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