The People's Democratic Republic of Algeria
Ministry of Higher Education and Scientific Research
High School of Business - Kolea

Thesis submitted in Partial Fulfillment of Requirements for the Degree of
Doctorate science in Marketing

IMPROVING COMPETITIVE PERFORMANCE USING DISCRIMINANT ANALYSIS – THE CASE OF ENTREPRENEURSHIP IN ALGERIA

Submitted by: Supervised by:

ADNANE Houssem   Pr. LALAOUI Amor

Professor's Name	Academic ranks	Professor's University	Jury Composition
Taher LAHRACHE	Pr	High School of Business - Kolea	Chairman
Amor LALAOUI	Pr	High School of Business - Kolea	Supervisor
Benaissa ANNABI	Pr	High School of Business - Kolea	Examiner
Amina BERREZIGA	Pr	High School of Business - Kolea	Examiner
Sid ahmed HADJ AISSA	Pr	Blida 2 university	Examiner
Zoubir Ayyache	Pr	Oum el bouaghi university	Examiner
Wafia ZAIER	SL	Blida 2 university	Examiner

2020/2021

ACKNOWLEDGEMENTS

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INTRODUCTION

It is a well-established fact that most of the major companies nowadays started from an idea followed by a small enterprise, that had a little contribution to the national GDP, after that the growth rate of the company itself related to the growth rate of the national economy will determine how fast the micro business will grow to join the medium and large enterprises especially if the evolution and the growth, accompanies the complementary businesses such as banks, raw material industry and procedures services, and if the small enterprise can't keep up with the local or national competition according to market segments, it will perish as the law of the markets dictates, in that case, and from the past studies and lessons from international market, we have learned that the small enterprise on the verge of bankruptcy will use many management maneuvers to avoid the total disappearance of the business; such as merger with similar sized companies or the acquisition by a larger enterprises, vertical and horizontal integration. although this may seem like a loss for the small business owner, it is a gain for the national economy growth and competitiveness regardless of who's the new owners.

That being said, the problem in developing countries in general and in Algeria specifically, we don t observe such a behavior in the national small and medium enterprises, it is appealing to start a study on the causes of the lack of competitiveness in that matter. In Algeria, using personal observation regarding the local entrepreneurs, we have noticed that; many of the small businesses in local area or in Algeria in general if generalization is suitable in that case, were not able to evolve nor to succeed in their hometown market, for instance, a successful small enterprise producing milk, as an example of family small business started its business in 1978 in eastern Algeria, operating from a small size workshop, has been able to maintain its business throughout times and economical and structural changes, management procedures from a generation to another, however, it has never been able to evolve to larger companies with more employees and financial capital, and it is still operating from the same small workshop with no branches elsewhere, this example is neither the first nor the only one in a series of similar cases observed in the Algerian market. This managerial behavior could risk the evanescence of the business in light of the fundamental changes in the people's desires and needs especially the cultural related ones. This phenomenon leads us to investigate and find new ways to evolve the competitive performance using a more pertinent tools and data to corroborate the problem and the solution.

Generally the studies concerned with the success of SME's involving two types of factors; the competitiveness from an internal perspective or the technical one, which includes the used technology, the raw materials, the costs of every step in the value chain the output …etc., and the external factors which are most likely market related factors such as cultural factors sociological, like the profitability of the area, the choice of served segment, the easy access to potential customers and suppliers, the distribution network the pricing policy and so on. In our current study the main aim is the second type of factors that affect the competitiveness, regardless of the managerial intention of the owners, as some of them do not have any intention to grow despite of the availability of all the favorable circumstances.

❖ **Research Problem**

For the previous reasons, our study aims to analyze that very subject or at least some of its principal questions using a distinguished statistical analysis by answering the following question:

How do we evaluate, rank and develop new enterprises using statistical technique in competitiveness Groups using discriminant analysis?

❖ **Research Questions**

In order to have sufficient information to develop an objective analytic conclusion about the problem of the study, we choose to articulate our study around the following secondary questions:

1) What are the requirements of a successful investment system?
2) Are the standards of competitiveness exist in developing investment economies?
3) How does creating statistical model based on discriminant analysis can raise competitiveness and efficiency among enterprises?
4) How to apply the entrepreneurship theory successfully in developing investment economies.
5) Can we measure the probability of success and evaluate the competitive performance with precision using a a statistical model?

❖ **Hypotheses**

Our research depends on a new method of competitiveness improvement, for that reason our hypotheses will not be as conventional as in the rest of economic phenomenon investigations, to answer the previous questions we have established numerous hypotheses as a direct response to the previous secondary questions, to be investigated during our research;

1) For a successful investment environment, the goods and services market, the financial market as well as the labor market must reach maturity
2) The Algerian economy is in transition between factor driven economy and efficiency driven economy, therefore the competitive advantage factors will be limited to four principal factors; quality/price ratio, choice of profitability zones on the basis of business type and sustainable good reputation relates to the experience and marketing mix.
3) By evaluating and ranking the new enterprises in competitive clusters using multiple factors we can raise the efficiency and the profitability of the enterprise and goods services provided by it
4) In a less developed investment economy, the entrepreneurs must avoid businesses and industries that require high technological level.
5) Based on a statistical model that measures all competitiveness and marketing variables, it is possible to calculate the probability of the financial success of the enterprise and by extent the the competitive performance of the goods and services provided by this enterprise, in highly significant confidence in the results.

❖ **The Choice of the Subject**

Almost all the new and existing businesses in Algeria consists of micro businesses; also, most of the observed cases are struggling to grow to a larger business, to compete or even to maintain its activity for a long period that passes the introduction phase. This have driven me to investigate and develop a new method based on LDA analysis model to improve the competitive performance for the new enterprises in order to set the Algerian investment business climate on the right track.

❖ **Research Objectives**

The main objective of the research is to develop an efficient method to evaluate, reorganize, rank and develop the small and medium enterprises in Algeria in a way that have a significant accuracy to predict the success of a new businesses and improve the competitive performance of the existing ones.

❖ **Research Methodology**

We have used descriptive analysis approach to describe the basic features of competitiveness and provide a simple summary about the gather data and give us a conclusion of the distribution and relations between the data segments.

❖ **Previous Studies on the Subject**

Many studies both locally an internationally has preceded our research with many key differences, we will present some of them with pertinent summary discussion:

The first study about the subject entitled "the competitive advantage of nations" by Michael porter, was one of the most important contribution in the competitiveness field, as it demonstrates the evolution and the key differences of competitiveness globally, comparing between most powerful industrial countries at the time (1990). However, the study main focus were the large enterprises in developed countries that are characterized by specific economic and managerial sophistication that can't be found nor benchmarked in Algerian market, in the short run at least.

The second study is The "Microeconomic Foundation of Prosperity: Findings from the Business Competitive Index » by Michael porter, in that study Michael porter used the diamond model as an applicable tool of competitive analysis and measurement across nations, using the four principal elements of the model (Business Structure and Rivalry, Demand Conditions, Factor Conditions, Related and Supporting Industries). the limitation of this model is it can't be applied in Algeria in general and it can't be applied in small enterprises in specific, as its main focus is to promote the competitiveness of regions or industrial clusters rather than individual enterprises, this type of industrial sophistication is an advanced phase that the Algerian national economy has not reached yet according to the global reports.

The third study; "دور مناخ الاستثمار في دعم و ترقية تنافسية الاقتصاد الوطني الجزائري " which translate as " the role of investment climate in supporting and developing the competitiveness of the Algerian economy" from a national economic journal published by ANNABA university. The author in that study has used the descriptive approach to evaluate the current competitive situation of the national economy trying to investigate the lack of competitiveness in many types of Algerian businesses, both in the local market as in the international one. The common point between our study in this study is that the author have introduced many macro competitive factors that work consistently to promote the national economy, however, nor the descriptive analysis approach neither the macro analysis does offers sufficient data and evidence to provide accurate and objective recommendations to increase the competitive performance of enterprises in the micro level.

The fourth study; "دراسة تحليلية لمناخ الاستثمار في الجزائر " translate as "analytic study of investment climate in Algeria" it was published by the journal of economy and society - university of mentouri Constantine, the author focused on the national investment climate from a different perspective by studying the behavior of foreign companies in the local

Algerian market, and how does the international firm that encompass the international managerial standards, perform under the specifications of the Algerian local market. This issue is similar to our current research quest, as it illustrate the different competitive elements in the national market, however, the subject was more about the foreign investment and the ability of adaptation, and we have choose to focus on the same ability of adaptation in the local enterprises.

❖ **Study Limitation**

Although the data collection process was rigorous, and the analysis taked into account many of the relevant factors and information, the study was not as accurate as intended, due to many reasons, such as the data depend greatly on the responses of many individuals which is characterized by a great deal of subjectivity, also due to the sensitivity of some informations, we were not able to measure the competitiveness in microanalysis level. The competitiveness in developing countries and in Algeria specifically does not have the required tools of measurement, nor do the annual reports provide the needed information to draw the pertinent facts., therefore, we cannot assume that the local behavior of Algerian entrepreneurs is consistent with the behavior of their peers in other developing economies. The proposed method using discriminant analysis to promote the competitive performance is considered as the first step in series of future research on the subject, as a result, it needs more testing to confirm its validity, or if necessary, new revision to assure its adaptation with different new cases or new business types.

The study was conducted between 2014 and 2019, in this period we have collected the relevant data for the analysis using many tools especially the questionnaire, the study mainly focused on small and medium enterprises competitiveness, aiming to analyze exclusively the efficiency drivers in the current Algerian business model.

❖ **The Framework of the study**

We have managed to divide the study into four chapters, in the first one we introduced competitiveness in general, from an academic perspective, also, we discussed the competitiveness from an industrial point of view according to Porter's theories, and we have illustrated some cases and experiences with thorough discussion according to academic studies in the competitiveness, to assert the lessons and the factors that have shaped national competitiveness overtime. we choose to start with competitiveness theories as the historical analytic approach provided some of the significant steps in the academic competitiveness field, also we have discussed some of the similar yet successful cases of competitiveness across the world with respect to the Algerian economy similarity.

In the second chapter, we have analyzed the recent national and international reports related to both competitiveness and entrepreneurship applications in the field, to underline the characteristics of the Algerian investment climate in comparison with the international one, and highlighting the main differences both academically and in real market application, from this point we were able to move forward with our Algerian local microanalysis of competitive performance.

The third chapter was about the methodology and the research plan used to collect and analyze the data, also, the reasons behind the choice of variables and how were they adapted from the international theory to the Algerian entrepreneurship case, to be both pertinent and practical in problem resolution, we have also tested the validy of the data and the data collect tools.

The fourth and the fifth chapter was dedicated to explain most of the statistical and mathematical results used in our research in order to provide a comprehensive understanding about the analysis and the information in light of our research assumptions. And the last section of the fourth chapter was devoted to the results, finding and the discussion of the results, with thorough discussion of each hypothesis and research question in light of the statistical findings

CHAPTER

ONE

Chapter 1: The Evolution of Competitiveness

All the studies is that competitiveness is significantly related to the industrial field; even if we assess the countries' economies, the local trade, distribution and marketing practices were never a part of the national competitiveness, which is the addition I will try to demonstrate in the developing economies that depends on commercial activities rather than a strong industrial base. In that sense, the competitive drivers shift from the diamond model introduced by porter to another model that determines how to maximize the value aspect in commercial activity and small or micro enterprise.

In the first chapter, "*the evolution of competitiveness*", we will analyze the evolution of competitiveness from a theoretical perspective and also we will present the pertinent cases, that reflect the use of competitiveness in economic environment and also the global or international cases taken from developing countries such as the middle east, Latin American Countries, and even the Chinese economy.

In this chapter we will discuss multiple points, the first one is about the general theoretical context of competitiveness, and how it was defined by different managers and businessmen, these ideas about competitiveness will determine the use of competitiveness in every field and how it was applied in different economies throughout different stages.

In the second point, we will discuss the competitiveness according to Porter, which is one of the most known explanations of how industries succeed while others fail, and how come a nation is more productive and efficient in a certain industry while another country can't succeed efficiently in that particular industry or can't compete directly with the first one, and by rising those questions we will demonstrate the competitiveness evolution from global industrial concept to the local and micro economic concept.

In the third point, we will discuss the competitive strategies from a marketing perspective according to Philip Kotler, in which we will explore the different competitive strategies in different market positions, and how can an enterprise in certain market level uses its competitive capabilities to take down the enterprises in the level above. Those levels are distributed based on the market share in a specific market,

In the last section, we will explore different cases from different economic classifications, from developing countries specially to demonstrate how those economies operate and how they proceed to boost their production and efficiency, the objective from this analysis will be more evident in the next chapters.

1.1. Overview of Competitiveness

By observing the industrial evolution in the 50's and the early 60's we can clearly distinguish a certain pattern in the international markets, as the previous model of quality goods and corporate, national culture in doings business, also the classic management itself began to fade, as the new developed and complicated industries emerge. In this period of quick market evolution, the managers across the world have no choice but to adapt with this quick change, however on a long-term strategy it is proven to be difficult, this is why new trend of doing business is to anticipate the future and the global market orientations.

A very important notion that needs to be underlined is that the competitiveness does not have a unified and exact definition that one should consider as a standard rule and rely on it in the academic studies. However, in my selective literature I noticed a common agreement about two types of competitiveness definitions; the first, involves, an information system that collect and analyze raw data, aims to provide the correct information to the decision makers in different levels and issues. The second definition is first mentioned by porter in his studies about competitive advantage; and that definition is different from the first one, as it bound the notion of competitiveness to the industrial area and essentially discusses the competitiveness in the pre-manufacturing phase (the pertinent strategy).

1.1.1. Competitiveness Background

Every industrial economy depends essentiality on productivity and a competitive environment, in this case it is required to develop many global economic factors, such as; domestic investment, exports and imports, direct foreign investment, domestic innovation, however, the question of how? Is a vast subject and differed from nation to nation and from culture to culture, in that matter, the European indusial boost perspective of high lifestyle, in their products, in the other hand, the Japanese firms direct their industries toward the technological advancement, some other Asian firms compete on cost basis, and this is the way the competitive theory differ according to multiple factors.

1.1.1.1. Competitiveness Causes

The competitiveness is not a well understood subject; some theories define it as a country share of the world market, which is a global definition that does not involve the microanalysis of nation activities, however a small region can be competitive, a specific industry among the national industrial fabric can be competitive, even a small business can be competitive, by reserving the market share in any given circumstances, and adapting to the fluid economic, and sociocultural factors.

The intensity of competition and the growing need to change and the rapid evolution of market trends define the need to take step back and analyze the determinants of competitive success, as described by porter "*competition in an industry continuously works to drive down the rate of return on invested capital toward the competitive flour rate of return*". [1]This is the main cause for the emergence of an academic field by the name of "microeconomics of competitiveness, and for this reason the business men continuously try to find a new way to compete and involve sociocultural studies to determine the impact of each factor on the local market and how to keep the market share within acceptable rate.

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[1] PORTER. M. E (1998)-Competitive Strategy: Techniques for Analyzing Industries and Competitors with new Introduction, The Free Press, P05.

in many classic theories the price remain the main driver for competitiveness, and as a consequence, the costs of manufacturing, distribution, marketing and so on are equally essential for competitiveness, this is why one of the three competitive strategies is; *the cost leadership strategy,* however, the evolution of market trends requires a certain structural change and effective way of doing business to fulfill the required needs according to the local buyer value chain,

in the 21 centuries, the cost leadership strategy has given its best, but it's time to look forward for new ways to compete, now the price is almost equally important as the services, the characteristics or the felling of the consumer when he uses this product for the first time.

Even advertising trends has shifted from classic marketing to new way of thinking, the marketers in the global companies are now targeting the psychological needs and the exotic life style, rather than just target the financial needs, this is one of the competitiveness causes; the product with lower price is not always the top selling product, and the company that depends on cost leadership strategy is not always the leader of the market or the one that has the bigger market share, the competition have shifted, it is now a competition over the value of the product.

1.1.1.2. the Competition
The competition is a critical factor for all the marketing and the management theories; it includes all the rival offering and substitutes that a buyer may consider on his buying to consuming process, in other industries, the substitute products can be more affecting and influencing than the direct competitors, if we take a steel company that manufacture almost all the parts in automobiles, so in this way the automobile industry reached its best demand, however this steel company have to foresee the danger in the substitute product, as the automobile company is also searching for less costly products that does not affect the value chain, so they replace some of the car parts with engineered plastic, or aluminum parts to lighten the weight. In this case the competition is not the narrow definition that everyone considers, and by the same methodology of thinking we can distinguish between four different types of competition according to *Kotler* [1]

1.1.1.2.1 the brand competition:
In this type the company consider in its competitive strategy, every other company that offer similar products and services to same class of buyers at a similar prices, so if we take a Volkswagen automobiles as a case, it sees a Toyota or Honda as their competitors rather than Mercedes of Ferrari, because a brand represent a certain level or class of buyers that are characterized by different kind of consuming habits or lifestyle or even cultural trends, and the buyers in each class shares the same buyer value, for example if we take a Ferrari automobile's customers we will distinguish an obvious pattern in their behavior and habits and even in their psychological characteristics ; they are full of life, they like everything expensive, they like to showoff , they like speed, they seeks to display their distinction from other people. And this is what brand represents to each buyer; it is its choice of lifestyle.

1.1.1.2.2 Industry competition:
This is a broader type of competition that encompasses the first kind; it includes all competitors of the same product regardless, its class, price, destined market, or targeted consumers. By applying the previous example in this case, the competitors of Volkswagen are

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[1] KOTLER, P. (2014) –Principles of Marketing, Pearson Education,. P349.

other automobile companies regardless of the other factors. this distinction will help the company to anticipate the potential buyers and the shifters (the buyers who change their consuming habits) based on a change in their financial situation or their behavior and the strategy that includes the industry competition will consider the buyer needs more than the price as a basis of competition.

1.1.1.2.3 Form competition:

This type of competition that involves the industry sector and consider the type of business as a competition because they fulfill a similar need, for example; a Renault company consider motorcycles and bikes companies as a competitors, and the goal behind this consideration is to gain more international market share and eliminate the risk of substitute product especially if the cost advantage is involved in this matter.

1.1.1.2.4 Generic competition:

This definition of competition involves the microeconomic theories as it defines the share of the company is the share of this company products or services in the global income of the consumer, they compete over the buyer money and incomes every company tries to maximize its share in this year income, and this definition serve as a monitor for both the lifecycle of the market and also the product or the service.

1.1.1.3. Competitiveness on a Marketing Level

Competitiveness on a marketing level is the search to find a new way to compete on markets depending only on the available factors after production including the marketing mix.

A study conducted in that subject by *Jorma Larimo* & al ; regarding the eastern European markets confirm that all companies operating on this markets including the foreign companies uses the same competitive and marketing as mentioned by *Jorma : " a powerful consumer service, good personal relationships, technical quality of the product, company image, personal selling, customer service, and managerial competence. The role of price and discounts was lower than expected. As expected, design and package, trade fairs and exhibitions, advertising, credit and countertrade arrangements were rated as clearly less significant marketing-mix elements by Western companies in EE markets"*. [1]Therefore, in competition, a marketing approach is expected to make the difference between similar businesses.

To demonstrate the effect of marketing approach on competitiveness and competitive performance for example, the effect of advertising and consumer behavior studies on competitiveness can be observed in high competitive market, and if we analyze "*dell*" and "*HP*" firms, we find that they serve the same market (the personal and the laptop computers), and work in the similar sector (the computer manufacturing industry), and they target the same buyers, however, they compete on different basis, dell target the quality and try to minimize the costs, and HP try to promote the sells, at lower prices with acceptable quality. However, the competitiveness that involves marketing approaches requires a highly competitive market and similar product or service industry in order to achieve the leader market share.

The communication strategies and tactics for example; are effective when we choose the right method for the right market specification (respect religion restricts, geographical characteristic, the rate of educated people, etc.)

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[1] LARIMO. J & al, -(2002) «Competitiveness and marketing strategies of foreign companies in Eastern Europe: Empirical evidence from Finnish and Austrian companies», Journal for East European Management Studies, Vol. 7, No. 4, P367

1.1.2. Competitive Intelligence

The competitive intelligence is a fundamental branch of competitiveness, it provides many required information to choose and initiate a competitive strategy. The competitive intelligence by definition is *"the system that tracks the activity of direct and indirect competitors in a range of fields; general business activity, business development, strategy and tactics in different sectors or new activities, patent registration, research activity and so on"* [1].

1.1.2.1. Definition of Competitive Intelligence

The business intelligence is an integral part of decision making, according to Hasanali.F [2], smart organization know that to stay competitive, they must be able to anticipate and react to each action in the business world, in order to do that they must be flexible by conducting the necessary changes inside and outside of their industries. They also know that this requires having a plan for turning data into actionable intelligence from which strategically and tactically important decisions can be made, this knowledge is what we called in business "competitive intelligence".

Herring.S identifies two categories of information needed for business strategy formulation:[3]

- ✓ Information about the company's own resources and capabilities.
- ✓ Information about the company's external environment.

For Herring the competitive intelligence is about the knowledge of the internal forces and weaknesses and the external threats and opportunities, his view of the competitive intelligence came from Sun Tzu "the art of war" (if you know the enemy and know yourself, you need not fear the result of hundred battles).

Sawka defines competitive intelligence as knowledge and foreknowledge about the external operating environment.[4]

J. E. Prescott considers CI (competitive intelligence) a prelude to informed decision-making, and further argues that intelligence can be viewed as actionable information about a customer, market situation, regulator, competitor or any other external influence. [5]

For McGonagle & Vella, it is characteristic for the intelligent companies to seek, process and use information about outside environment to manage their future[6].

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[1] ROUACH, D & al ,(2001) «Competitive Intelligence Adds Value: Five Intelligence Attitudes», <u>European Management Journal</u>, Vol. 19, No. 5 , P367.

[2] HASANALI, F -(2004)Competitive intelligence- A guide for your journey to best-practice processes, the American productivity & Quality Centre, P15.

[3] HERRING, S. C, (1993), «Gender and democracy in computer-mediated communication», Electronic Journal of Communication, Vol. 03, P6-328.

[4] SAWKA, K.A., (1996) « Demystifying business intelligence», ManagementReview,85 (10), P47.

[5] PRESCOTT,J. E, &al (2001)- Proven Strategies in Competitive Intelligence: lessons from the trenches, John Wiley and sons, p.195.

[6] MCGONAGLE. J, CAROLYN. M. V (1996)- A New Archetype for Competitive Intelligence, Greenwood Publishing Group, p.21.

Kahaner "CI is a strategic tool that enables senior management to improve its competitiveness by identifying key driving forces and anticipate future market directions"[1]

From those definitions, we can say that the CI is a reliable tool against the competitive war between the companies; it is the basic step for the improvement of the company performance and competitiveness.

1.1.2.2. The Evolution of Competitive Intelligence:
Table I.1: The Evolution of Competitive Intelligence

Evolution of Competitive Intelligence				
Time Period	**Pre-1980**	**1980-1987**	**1988-Present**	**Future**
Stages	Competitive Data Gathering	Industry and Competitor Analysis	Competitive Intelligence	Competitive Intelligence as a Core Capability
Key Defining Event	Porter's 1980 book, *Competitive Strategy*	The founding of the Society of Competitive Intelligence Professionals	The establishment of the Competitive Intelligence Review	CI courses taught in business schools across the world
Attributes:				
Degree of Formality	Informal	Emerging Formal Units	Formal	Integration of formal and informal
Orientation	Tactical	Tactical	Mixed	Strategic
Analysis	Little or none	Limited quantitative	Both quantitative and qualitative	Qualitative emphasis
Top Management Attention	Low	Limited	Moderate	High
Link to Decision-Making Processes	Little	Weak	Strong	Direct input
Location:				
Principle Location of CI Personnel	Library/Marketing	Planning/Marketing	Marketing/Planning/ CI Unit	CI Units/Marketing/Planning
Key Issues:				
	Development of skills in information acquisition	Building a business case for CI Spy image Analytical skill development	Demonstrating bottom-line input Demand vs. supply-driven CI Counter-intelligence International CI CI Technology Role of information technology	Managing the parallel process Intelligence infrastructures for multinationals CI as learning Network analysis

Source: DANIEL ROUACH & al - 1999, «The Evolution of Competitive Intelligence», APMP spring, p39.

According to the previous table, we can conclude that competitive intelligence in the pre-80's phase was limited to the data collect process, by competing though the best way to reduce costs, or the new technologies and the innovative methods to do business or the new products in markets, or the new styles and trends in the markets. However, between 1980 and 1987 the competitive data collection was majorly used by industrialists in a way to compete over the international market share, is basically close to what we call the industrial espionage, with the difference that competitive analysis involves legal methods and statistical analysis. After 1988 the CI takes a new step toward full integration within the firms and companies' structure.

According to other factors such as; degree of formality, orientation, analysis attention and link to top management decisions, we observe a certain variation between the pre 80's

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[1] KAHANER. L - (1997)Competitive Intelligence: How To Gather Analyze And Use Information To Move Your Business To The Top, Simon and Schuster, , p.11.

phase and 80 to 87, and the after 88 period. This discrepancy reflects the evolution of CI function among the industry core structure.

From an organizational perspective, the CI function is integrated in the marketing department, because of many similarities and requirements in the marketing plan that need competitive information, that is why most companies tries to develop the information network, in order to compete in more efficient way.

1.1.2.3. Competitive Intelligence in the New Competitive Environment
Obviously, there is no need to explain the crucial role of the CI in the modern business world where the communication system is evolving every day, such as the internet, it had dramatically accelerated the speed at which firms can find and access information about competitors or markets (CI).

Fuld & Co the founder of the Cambridge, Massachusetts, training and consulting firms, specialized in competitive intelligence warned executives about the change in the markets, the executives must be careful to avoid spending so much time and effort tracking the competitive actions of traditional competitors that they ignore new competitors.

Drucker, whom many considered him to be the father of modern management wrote," Increasingly, a winning strategy will require information about events and conditions outside the institution: noncustomers, technologies other than those currently used by the company and its present competitors, markets not currently served, and so on" [1]

Many executives assume that the new competitor's growth is too slow and too predictable to be worried about, generally this is the case, but sometimes the new entrants adapt a hidden offensive strategy, by taking new groups of other firms' customers each time. Without competitive intelligence system, the firm can never realize the danger of such neglect until it is too late, that is why Porter put the *new entrant (*in his five forces model*)* threat at the same level as the other competitors; he estimated this kind of threat to be equally important as the other four forces that affects the organization strategy.

Canada is reputed to be one of the leader's countries in economic competitive intelligence field. In 2003, the Society of competitive intelligence professionals (SCIP) has counted 172 members working in the CI field in Canada including 55% corporate, 13% small consultants, 6% large consulting firms, 13% government and 6% academic[2].

1.1.3. Competitive Data Analysis: Case of "Procter & Gamble"
Differing definition of competitive intelligence and the related disciplines of business intelligence and market intelligence can interfere with firm's ability to organize a helpful process of benchmarking, for this matter we have to put each term on his proper place to recognize basic differences.

✓ Business intelligence (BI): is the analysis of internal data, most commonly from financial systems, to provide insight into the most profitable types of firm business.

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[1] DESS. G. G.T. (2005)Lumpkin and Marilyn L. Taylor, «Competitive Intelligence», Strategic Management, McGraw-hill Irwin, NewYork, 2ed, p.11

[2] ALLGAIER. C (1998) «Enhancing Sales and Marketing Effectiveness Through Competitive Intelligence», Competitive Intelligence Review, Vol.9, p.6.

- ✓ Market intelligence (MI): is an understanding of the needs and activities of organizations within the border context of that organization's industry, geographic markets, customer base, labor pool, finance sources…
- ✓ The competitive intelligence (CI): as we already defined, is the process of compiling, analyzing and sharing external data, most commonly about your ability to meet market needs compared to that of your competitors.

1.1.3.1. Summary for Procter & Gamble (P&G)

Procter & gamble is an American multinational corporation headquartered in down Cincinnati, Ohio and manufactures a wide range of consumer goods.

In 2011, P&G made 82.6 billion dollars in sales, Fortune Magazine ranked her at fifth place of the world's most admired companies" list, which was up from sixth place in 2010.

As of July 1, 2011, the company's operations are categorized into two "global Business Units" with each Global business Unit divided into "Business Segments" according to the company's 2011 annual Report. Dmitri Panayiotopoulos is Vice chairman of Global Business Units

- ✓ Beauty segment
- ✓ Grooming segment
- ✓ Health Care segment
- ✓ Snacks & pet Care segment
- ✓ Fabric Care & home Care segment
- ✓ Baby Care & Family Home Care segment

Those are the main investment fields of Procter & gamble company. We tried to summarize the main businesses information related to this company for the purpose of introducing the competitive intelligence process and his evolution throw time and how they build a powerful competitive intelligence database.

1.1.3.2. Data Analysis Process

According to many CI practitioners, there is no need to spy or use illegal methods to obtain information because all the necessary information is available throw several channels. Bill Weber, executive director of the Society of competition Intelligence Professionals (SCIP), most information can be garnered through overt means. He adds, "The internet has created a wealth of stuff that just has to be analyzed"[1], John Nolen, Chairman of phoenix Consulting Group, "We pick up what people leave lying about in the workspaces, or listen to people talk on their cell phones in such environments", others will go even further by using what they called "dumpster diving tactic". That means that the data the companies need are most of the time traded or discarded in the public arena.

The competitive intelligence system essentially includes three phases: organization CI, search process, sense-making process:

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[1] JORDAN.J, (2005)Professor Sydney Finkelstein, «The Ethic of Competitive Intelligence», Tuck School of Business at Dartmouth, P.2.

The first phase is the organizing for CI, concerned organizational arrangements or structures for CI efforts. Formal structure; refers to firm's organizational arrangements or structure for competitive intelligence activities as evidenced by a formal delineation of staff and resources. As Fahey and King observe, some organizations have "competitive intelligence units" with a full-time director and associated staff, others change their structures frequently, approximately five years (this case demonstrated by Stubbart study [1].

The second phase of competitive intelligence is "Searching"; it is about gathering information about competitors. The search defined as the active exploration for information pertaining to competitors.

The sense making is a process in which competitive intelligence team or analysts reaches a conclusion about competitors, who is the best in class why is that company always ahead of others why this product. Personally, I prefer to conduct this kind of search in the education field like building an intelligence network concerning the universities, if rules of competition, can be applied among universities the education system will be very efficient and the benchmarking study will be very useful in this field.

Figure I.1: Data Analysis Process
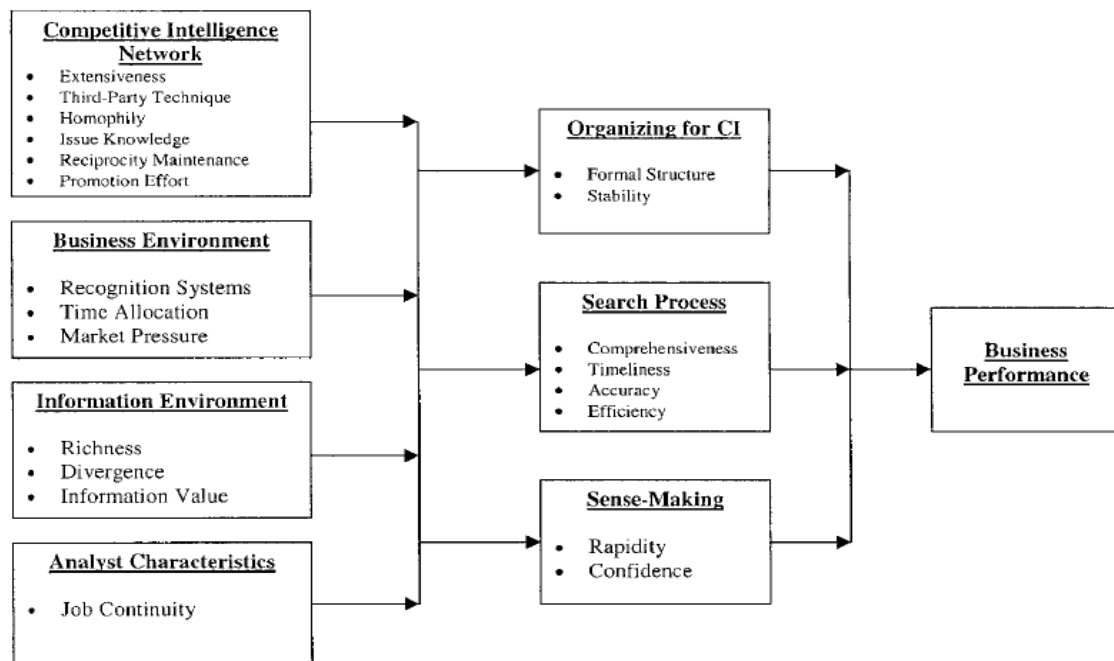
Source: JAWORSKI, MACANNIS and KOHLI, 2002, «Generating Competitive Intelligence in Organizations», Journal of Market-Focused Management, Kluwer Academic Publishers, Manufactured in Netherlands, Boston, vol5, P.283.

1.1.3.3. Competitive Intelligence at Procter & Gamble

Michael Allan, the former director of baby-care business division in Europe said: "it won't be the big that eat the small, it will be the fast that eat the slow"[2] that means if the size of the company matter for the competitive war, it will not be as important as the speed of thinking and

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[1] MAIDMENT F, MAIDMENT H- (1998)International Business, 98-99, McGraw-Hill Higher Education, p.104.

[2] SOCIETY OF COMPETITIVE INTELLIGENCE PROFESSIONALS) 2002) -Proven Strategies in Competitive Intelligence: Lessons from the Trenches, John Wiley & Sons, 14 mars, p.25.

the speed of action. This requires a good competitive intelligence system; this CI is even more important today.

As John E Pepper (former chairman of the executive committee of the board of directors of the Procter & Gamble, company) describe the role of competitive intelligence at P&G, "prior to 1985 it was functionally focused. We had clear focus in R&D at very early stage, and we had focus in marketing. In 1985, we started to bring in multifunctional examination of strategies. In 1988, we had our first global multi-sector analysis. Over the period of time since, under the leadership of Susan Steinhardt, our director of corporate competitive analysis, we have done much more in the area of benchmarking, which has been fundamental to our ability to know where we were too heavy in our administrative work. This has included benchmarking in terms of speed to market and benchmarking the structure of our organization as we went into this move"[1].

From what he said, we can deduce that the competitive intelligence was among the first function of the company with the R&D and marketing and strategic analysis. Also, mentioning the director of corporate competitive analysis suggest that the competitive studies and collecting data about the environment so called "CI" is one of the important managerial factors of the success.

John, also mentioned the benchmarking with the previous function, this will demonstrate the strong relation between those functions (marketing, competitive intelligence and benchmarking).

We notice that he named many key dates, which is referring to the constant change in the global orientation of the company, so the role of CI in Procter and gamble have changed through time. The table below demonstrates the main changes in CI function at P&G

Table I.2: CI at Procter & Gamble

"Old World"	"New World"
• Static competitive analysis	• Dynamic competitive response modeling
• Routine report generation, reactive	• CI embedded in strategy development and option analysis
• Responsibility of CI analysts	• Everybody's responsibility
• Highly centralized and highly decentralized	• "Hub & spoke"
• Individually and functionally driven	• Team effort
• "Need to know"	• "Need to share"
• Limited and sporadic top-management support	• Top management deeply involved

Source: John E. Pepper, 1999, « Competitive Intelligence at Procter & Gamble Competitive Intelligence Review, John Wiley & Sons, Volume10, Issue4, P.6.

1.1.3.4. The Ethics of Competitive Intelligence (P&G Case)

In spring of 2001, John Pepper, then chairman of P&G, discovered that members of P&G's competitive analysis department engaged in corporate spying practices at its rival corporation, Unilever. The spying operation gathered about eighty documents detailing Unilever's plans for its U.S hair care business over the next three years, including information on its launch-plans, prices, and margins. This information came as a complete surprise to Pepper, who had not commissioned nor condoned this operation. In addition, P&G had their

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[1] PEPPER. J. E(- 1999)«Competitive Intelligence at Procter & Gamble», Competitive Intelligence Review, John Wiley & Sons, , Vole 10, p.5-6

competitive intelligence operatives misrepresent themselves to Unilever employees, claiming that they were market analysts, journalists, and students.

The details of the spying operation are irrelevant to our subject, but P&G have gotten herself in law problems that caused very heavy losses in several levels. Although this story is very popular among business and managers and new world economic leaders, many competitive intelligence agencies frown at using the term "espionage refers to illegal information gathering, to describe their profession but still uses some illegal tools to obtain information.

According to Fortune 100 magazine, Fortune 100 companies lost 45$ billion to thefts of proprietary information in 1999. For that reason, the Society of competitive intelligence Professional (SCIP) have created a code of ethics for CI professionals:

- ✓ To continually strive to increase the recognition and respect of the profession.
- ✓ To comply with all applicable laws, domestic and international.
- ✓ To accurately disclose all relevant information, including one's identity and organization, prior to all interviews.
- ✓ To fully respect all requests for confidentiality of information.
- ✓ To avoid conflicts of interest in fulfilling one's duties.
- ✓ To provide honest and realistic recommendations and conclusions in the execution of one's duties.
- ✓ To promote this code of ethics within one's company, with third-party contractors and within the entire profession.
- ✓ To faithfully adhere to and abide by one's company policies, objectives, and guidelines.

1.2. Competitiveness Theory According to Porter

Porter theory describes the competitiveness from different points of view, he studies many competitive environments across the world and he collected data concerning the economy of many nations, according to his analysis, the competitiveness is more than information, it is the reaction that company takes in different circumstances or business environment.

In the 1980's porter introduced new understanding of the competitive knowledge, especially in some industries, in his books, he explained why some industries are successful in some countries and not in the others and in his theory the firm is the principal actor in economy than the nation as a macroeconomic system, however he described the role of each factor in the competitive success and how can the national environment shape the firms competitive advantage.

He also introduced many models to explain the competitive success in both marketing and strategy such as the *"diamond model", "the five competitive forces"*.

According to Michael Porter in his book "competitive advantage of nations", "companies achieve competitive advantage through acts of innovation. They approach innovation in its broadest sense, including both new technologies and new ways of doing thing[1]

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[1] PORTER. M– (1996)The competitive advantage of nations, Palgrave Macmillan, p.93.

In fact there is more than that in the competitive advantage, it is like a gift or an art it is exclusive to some companies or nations and hard to obtain but it can also be improved, there is many ways to develop a competitive advantage some involves prices and costs and others require a structural change and in most cases the competitive advantage is related to the value of the product in the eyes of the consumers and we will discuss in this part the most known and applicable competitive advantages.

1.2.1. Competitiveness through Differentiation:

The differentiation strategy, involves structural change that encourage and facilitate the technological development or change any phase or stage in the value chain to deliver a special value from a consumer perspective.

"A firm differentiates itself from its competitors if it can be unique at something that is valuable to buyers"[1]. From that definition, the differentiation can be measured according to the buyer not to the competitors, so it is a subjective customer's value.

1.2.1.1. The Source of Differentiation

Differentiation strategy is providing a unique thing, valuable to buyers beyond low price.

1.2.1.1.1 Differentiation and the value chain*

The differentiation in this process starts with the good selection of raw materials (the best wood for a piano maker), after that, each activity contributes in the final product value also contribute in its differentiation. Value activities representing only a small percentage of total cost can nevertheless have a major impact on differentiation.

1.2.1.1.2 Drivers of uniqueness

A firm uniqueness in a value activity is determined by a series of basic drivers, the firm must identify them to maintain her uniqueness and create and develop new form of differentiation. From those drivers we find (policy choices, linkage, timing, location, interrelationships, learning and spillovers, integration, scale, institutional factors…)*

However, we must note that the differentiation is usually costly. This cost differs from one differentiation form to another.

Figure I.2: Relation between Uniqueness and Cost Drivers
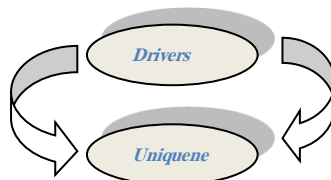
Source: (my work based on porter's theory))

1.2.1.2. Buyer value and differentiation

As we mentioned before, the differentiation can only be measured by a subjective perspective of the buyer. So how can the firm products generate a buyer value?

1.2.1.2.1 Buyer value

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[1] PHILIPPE DE LAVERAGNE (traduction) -Michael P: L'avantage Concurrentiel, Inter-édition, p.153, 175,207

This can be happened by either: <u>raising buyer performance</u> (high performance product or service) or by <u>lowing buyer costs</u> (ex: a less consuming electricity refrigerator).

1.2.1.2.2 The value chain and buyer value

"The only one way to co-ordinate a range of activities is to bring them within the control of single firm"[1]. therefore the buyer value chain is affected by the side effects of this coordination, for example: for a truck manufacturer several value activities will probably affect the buyer value, heavy truck add logistical costs, its capacity affect the delivery costs… so the presumed value of the product by the firm is not always the same by the buyer.

1.2.1.2.3 Buyer perception of value

For the buyer the real value of the product = the value generated by the value chain of the firm (use criteria) + perceived buyer value (signaling criteria).

Notes: 1) The perceived buyer value can be positive as it can be negative value.
2) The buyer and the real consumer may not be the same ex: doctor and patient.

For identifying buyer purchase criteria we have to illustrate the two types of criteria:

- ✓ <u>Use criteria</u>: These criteria might include many such factors as product quality, features, delivery time… it is related to the firm value chain so it can affect the buyer value through lowering buyer costs of raising buyer performance, and for knowing which factors influence the buyer value more we have to know the real buyer needs and translate it into actual sophisticated product.
- ✓ <u>The signaling criteria</u>: these criteria reflect the signals of value that influence the buyer's perception of the firm or product like reputation, image packaging, price, weight… those criteria are the most important when buyers have difficulties to measure the firm or product performance. Part of those criteria is directly controlled by the firm (advertising), while the other part is outside of the firm control (word of mouth), in this part the negative signal value can be generated.

Figure I.3: Actual Versus Perceived Buyer Value
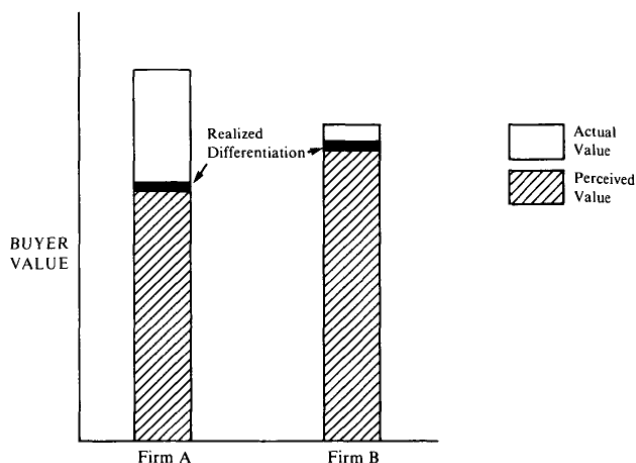
Source: PHILIPPE DE LAVERAGNE (traduction) -Michael Porter: L'avantage Concurrentiel, Inter-édition, p.175)

1.2.1.3. The Differentiation Steps

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[1] HUMPHEY. J (2003) - The Value Chain Approach –linking national producers to international buyers and markets, Institute of Development Studies, University of Sussex, Brighton, UK, p.1.

We have seen the common uniqueness drivers and how to increase the perceived buyer value using the use criteria and the signaling criteria, also we have illustrated how the firm can achieve differentiation from its competitors through lowing buyer cost or raising the buyer performance, now we will demonstrate how the differentiation can be applied by following these steps:

1.2.1.3.1 Determine the real buyer

This is the first step in differentiation analysis, usually, more than one individual participates in the buying process, so this group of individuals contribute in interpreting the use criteria as well as defining signaling criteria. Channels may be buyers.

1.2.1.3.2 Identify the buyer's and the firms value chain

The firm value chain has a large impact on the buyer value chain, the firm must clearly understand all the ways that could affect its buyer value chain (use criteria and signaling)

1.2.1.3.3 Assess the potential source of uniqueness in the firm

It means a full diagnostic of the firm's value chain looking for uniqueness drivers.

1.2.1.3.4 Choose the configuration of value activities that creates the most valuable differentiation relative to cost of differentiation

According to Crosby: "the sum of price of conformance and price of non-conformance"[1],it refers to the cost of doing thing right and the cost when the work fails to conform to customer requirement (substitute costs), the objective in this step is to create the largest gap between buyer value and differentiation cost.

1.2.1.3.5 Test the chosen differentiation strategy
1.2.1.3.6 Reduce cost in activities that has no effect on the chosen form of differentiation

In this part we must pay attention to the common pitfalls, such as:
- ✓ Uniqueness that is not valuable
- ✓ Too much differentiation
- ✓ Very high price
- ✓ Ignoring the need to signal value
- ✓ Not knowing the cost of differentiation
- ✓ Focus on the product instead of the whole value chain.

I have summarized the differentiation strategy from the meaning of the concepts to the implementation of this strategy in the firm. Next we will explore the second strategy.

1.2.2. Competitiveness using Technology:

The technology is one of the most powerful drivers of competition; it has a major role in creating new industries, therefore a new market, new players (competitors), and a new market mechanism of market. So the companies that possess a competitive advantage based on technology can create new markets, consequently a monopoly position.

1.2.2.1. Technology Life Cycle and Costs:

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[1] ADRIAENSENS. B, (1992)Marc I, Michel V -<u>Marketing et Qualité Totale</u>, De Boeck Supérieur, p.149.

Figure I.4: The Technology Lifecycle (by Rogers)
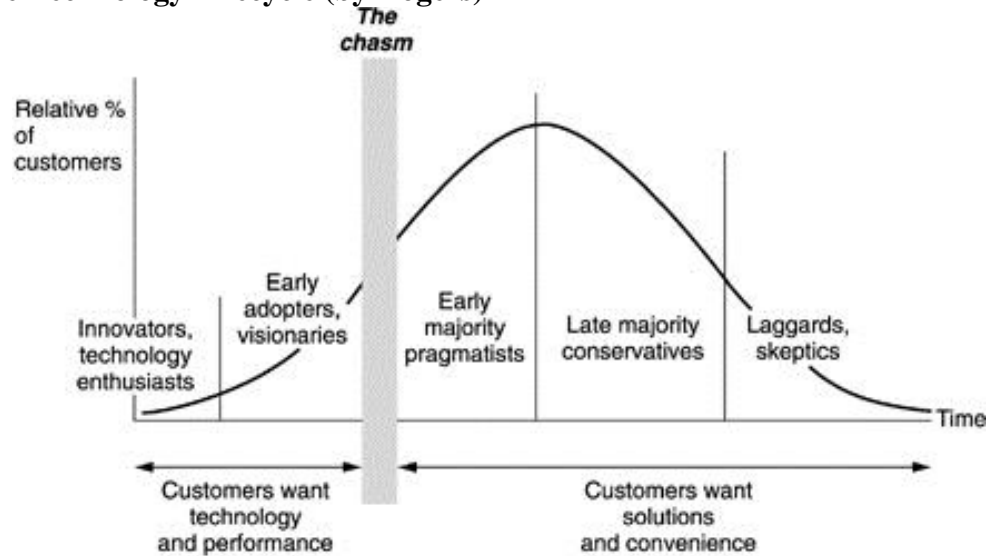
Source: http://www.nngroup.com/reports/life_cycle_of_tech.html (consulted in 21/07/16)

From that figure we can notice that the consumers of a product or service with new technology vary from innovators technology enthusiasts (the people waiting for the new technology impatiently), late majority conservatives (the cautious consumers whose chose their products carefully) to the skeptics (they do not believe in the new technology performance and they prefer the traditional ways of doing things).

We notice also that the majority of new technology consumers want solution and convenience, while the others want technology and performance.

In my opinion I believe that the consumer hesitation about the new technology product is about the price. Generally, the cost of the R&D (research and development) is very high, so unless the firm benefits from the economies of scale or good cost management program, the price will be too high for the consumer to bear.

According to Jean and Yvon in their case study of several firms, the cost of new technology can reduce the total cost by 0.8% to 1%, which change the perspective of the direct or positive relationship between the development of the new technologies and the general cost of the firm[1]

According to Joe tidd & other (2005), a number of studies have shown marked, similar and persistent differences amongst industrial sectors in source and direction of technological change that can affect the cost of technology[2]
.
- ✓ Size of innovating firms: like big chemicals firms, road vehicles, aircraft…
- ✓ Type of product made: typically price sensitive in bulk materials and consumer products, and performance sensitive in drugs and machinery.
- ✓ Objective of innovation: if it is product innovation or process innovation, in the product innovation affect the variable costs and the process innovation affect the fixed costs.

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[1] MALOUIN. J . GASSE. L, Y– (1992)L'innovation Technologique dans les PME Manufacturières : étude de cas et enquête, IRPP.P7.

[2] TIDD. J, BESSANT. J, PAVITT. K, (2005-)INNOVATION Managing: Integrating Technological, Market and Organizational Change Third Edition, John Wiley & Sons, , p.170

✔ Source of innovation: suppliers of equipment and other production inputs. The raw materials can define the amount of costs expected in innovation.
✔ Locus of own innovation: R&D laboratories in chemicals production, engineering in automobiles, and system department in service industries. Every department has a large impact on total cost and the firm should pay attention to each of them.

1.2.2.2. Technology and Competition

technology is very important for competition; it can significantly affect a firm's competitive advantage through the concepts of the value chain.

1.2.2.3. Technology and the Value Chain

The technology has a major impact on the value chain, as we illustrated before, the value chain is combination of activities, if every value activity uses some technology to combine purchased inputs and human resources to produce outputs, then the collection of activities is a collection of technologies, this can show the influence of technology on the final product value, consequently the buyer value chain.

Figure I.5: Representative Technologies in a Firm's Value Chain
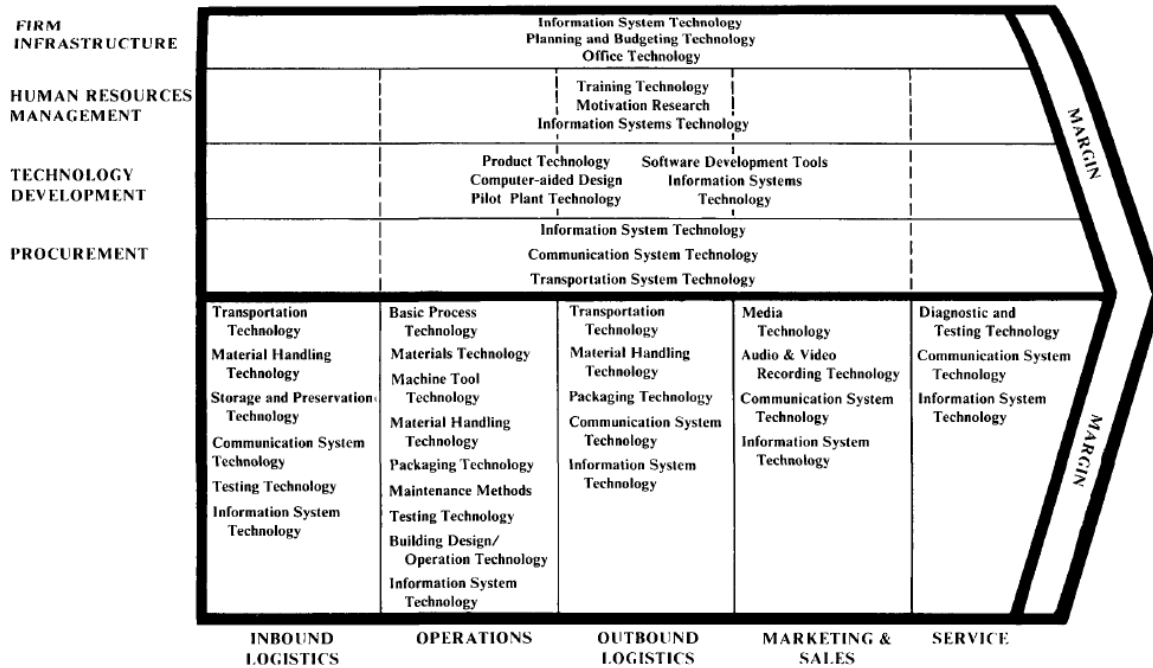
Source : PHILIPPE DE LAVERAGNE (traduction) -Michael Porter: L'avantage Concurrentiel, Inter-édition, p.207

Note: the technologies can affect the value chain negatively in case of change (ex: changing technology in one activity in manufacturer of aircraft requires a major change in the value chain.

1.2.2.4. Technology and Competitive Advantage

The innovation is an important source of competitive advantage; it has a significant role in determining relative cost position or differentiation. Since every activity in the firm involves technology, it will affect the cost (like the speed of vehicle parts assembly) or differentiation of a given product (cell phones). In addition to that it can help to build other competitive advantages like limiting the sales operation time, respecting deadlines…

The main problem on counting for technology as a source of competitive advantage is that every technology has a cycle of life, and also the consumers have an expected level of technology in every product that change constantly. The only way to face this problem is by raising her R&D activities, which raises the costs relatively. Well in this case the company may face also a cost problem, because in this case the firm has two choices either decreasing her markup (profit) or raising the price, in each of the cases the company loss another advantage. That's why the firm should balance between her costs and technological activities.

The other problem that threaten the innovation is the standardization, the purpose of business is to increase the profit, now what if the firm is unable to sell its products to all of potential customers, not because of the lack of innovation or consumer demand, but because the new product is not safe or reliable or in other way does not meet performance expectations (figure I.6), this is the reason why companies turn to standardization.

Figure I.6: Diffusion of Innovations
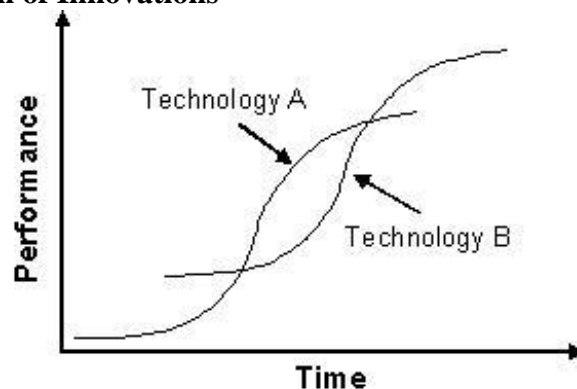
Source: http://innovationzen.com/blog/2006/08/17/innovation-management-theory-part-4/ (consulted in 22/7/16)

This figure is a representation of the diffusion of innovation theory. It shows that as soon as a new and higher performance technology is accepted from the customers, the old technology automatically goes to decline phase. This process has a big consequence on competitive position of organizations in many ways:

- ✓ Opinion leader within the social system: (they are the people who are influential on spreading either positive of negative information about innovation).
- ✓ Benefits and costs: the firm have to deal carefully with the indirect costs like the social conflict caused by innovation.
- ✓ Creative destruction: it is a concept developed by "Joseph Schumpeter"; it is an economic phenomenon refers to the fact that innovative entry by entrepreneurs is the force that sustains long-term economic growth, even as it destroys the value of establishing companies.

After we have illustrated the importance of the technology in determining the competitive advantage and its relation to the differentiation by costs or performance due to its influence on the value chain of both firm and buyer, we will demonstrate how the firm implement the technology as basic element of competitive strategy.

1.2.2.5. Technology Strategy

Technology strategy is a plan established by the firm in order to encompass the development and the use of technology. The technology must address those broad issues:

1.2.2.5.1 what technologies to develop

To identify the technologies to develop, the firm must determine the participation of several factors in the main objectives; the following figure will explain the factors to consider in technology developing choice:

Figure I.7: Principal Factors in Technologies Choices
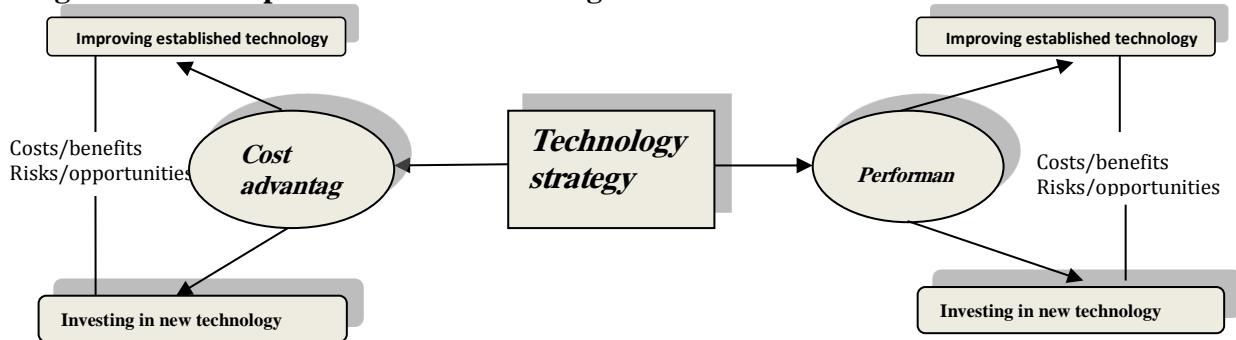
Based on that figure, the choice of the technology starts with the choice of the competitive advantage to improve, then the firm has to select between improving existing technology (most likely the technology to improve is in the maturity phase so it is less risky and also less profitable, unless the previous technology was successful and the consumers are expecting more), or investing in new one which will be more risky and costly.

1.2.2.5.2 Technological leadership or followership

Technological leadership: is when the firm seeks to be the first to introduce technological changes. Leadership can be established in technologies employed in any value activity and usually that kind of firm tends to use technology to achieve differentiation.

Technological followership: it is the opposite of the leadership, firms seeks for cost advantage through technology.

This type of management is called "the technological management", it represent a set of management disciplines that allow organizations to manage its technological fundamentals to create competitive advantage, which has revealed the need for a benchmarking studies and risk analysis of technological investments.

1.2.3. Competitiveness through Cost advantage:

The cost advantage is the ability of a firm to seek cost reduction in every activity in the value chain as possible, for example a diamond cutter have many activities in his workshop, including the costs of extra activities such as the costs of transportation, the raw materials prices, the distribution of the good and so on. In this case the diamond cutter can reduce the costs in different matters; for example using a substitute low cost input materials that fulfill the basic need or the purpose of the product. Another way is the outsourcing for new companies that have an advantage in one or more processes of the value chain.

Many international firms; are seeking the the eastern nations for production for one reason; it is the preferable environment, as an example. "DELL" Company is producing many parts of its computers in china for the encouraging nature of the business climate. Low wages, more working hours, low input materials by replacing wood or metal parts with plastic ones, less production and business taxes; therefore, a cost reduction.

There are also other business techniques and strategies used by companies to manage the costs in the minimum possible way; economies of scales, vertical and horizontal integration, standardization.

Generally, when a firm operates in large market, it has two ways to survive among competition; concentrate and focus her resources to serve a specific part of this market or create a product or a service with lower prices compared to his performance (cost advantage), the cost advantage is important due to his impact on competitive positioning when the firm operate on a large market.

1.2.3.1. Economies of Scale

This notion refers to the cost advantage that firms obtain through expansion. The principal idea of this concept is that the average cost per unit fall as the scale of output increase because the fixed costs will be divided equally on the volume of production (number of units). For example, in marketing, spreading the costs of advertising over a greater range of output. This idea can be applied in several areas.

Figure I.8: Economies of Scale
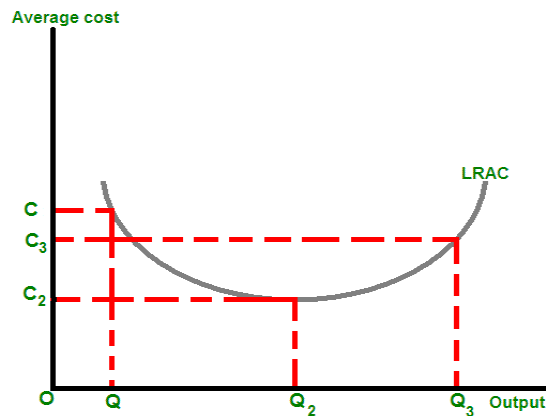
Source: Marvin S. Anderson, "Canadian Agriculture in the 21st Century: Change and Challenge", FriesenPress, 2015, P39

This figure illustrates the mechanisms of the economies of scale, the cost decrease from C to C2 when the outputs increase from Q to Q2. Based on this idea we can deduce that if the firm raises her outputs from Q2 to Q3 the average cost will raise again from C2 to C3 (due to logistical and managerial reasons like the standardization of the product and the neglect of customer needs), this concept called "diseconomy of scale". Therefore the firm can balance between these two ideas to reach "the ideal firm size".

So the good use of the concept of economies of scale (the ideal firm size), is one of many ways to create a competitive advantage based on costs.

A firm can typically improve her cost framework though vertical/horizontal integration or what is called the expansion strategy. The horizontal integration describe a type of ownership that occurred when a firm is being taken over by, or merged with another firm which is in the same industry, it has many consequences such as economies of scale and horizontal monopoly, but this type of integration is irrelevant to our subject because generally reflects a failure in firms competitive abilities.

1.2.3.2. Vertical integration

It refers to the case when a firm owns its downstream suppliers or upstream buyers or both, for example: the Indian company reliance industries has acquired Malaysian polyester maker Hualon Corporation (one of the world's largest polyester manufacturer), this acquisition has increased: her capacity by 25%, her global market share by 7%. And this integration has certainly influenced her cost structure.

There is three types of vertical integration, each one contribute in lowing costs in short term and creating a cost competitive advantage in long term:

1.2.3.2.1 Backward vertical integration

When the company controls subsidiaries that produce some of the inputs used in the production of its products, for example a motorcycle company owns a tire company. The objective of this type of integration is to minimize costs by centralizing the production, in other word the acquisition of the input company help the firm to control the quality and the cost of these inputs and avoid some of the unnecessary payments.

1.2.3.2.2 Forward vertical integration

In this type the company trend to control distribution centers and retailers where its products are sold. This type is very important not only to reduce costs but to the value chain also by maintaining the firm's reputation and image. The company will have a direct access to valuable information's such as customers' needs and desires (improve her activities to conform to the buyer value chain).

1.2.3.2.3 Balanced vertical integration

It is the full control of all production components and activities from raw materials to final delivery.

The vertical integration can generate the experience effect which may also influence the cost structure. In a financial context it helps to reduce the cost by benefiting from the economies of scale and the ownership of the sales margin of the suppliers and the buyers. From a competitive point of view, it can reduce the cost of time, the opportunity costs, the cost of supply depletion and the cost of changing suppliers which is the most important element in cost structure, (Algerian defense ministry have changed the military aviation supplier and that cost her millions of dollars and employees).

1.2.3.3. Standardization

Standardization is the process of establishing a technical standard, which could be a standard specification (law materials), standard methods (production), standard definition (managerial specification), standard procedure and practices (sales, distribution, promotion) …

Usually, the concept of standardization is most used in the international marketing and the IT industries (information technology) due to the slow acceleration in most industrial technologies (most known industrial technologies are in maturity phase) or in other cases the technology exceed customer's needs, therefore the firm use the push marketing and lead the public opinion. The second case is international marketing because of the various consumer's cultures and habits…

For a cost competitive advantage, the standardization can help shape the cost structure.

1.2.3.3.1 Standardization benefits

✓ Generally, the standardization is a strategy applied in large international market with multi similitude in customer's behavior and other segmentation factors (geographic, purchase power…) for that reason the first benefit is the efficiency of coordination and control.

✓ Reduction in research and development costs due to unified specification and methods.

✓ Benefit from the economies of and experience effect (the reduction of work time or time cost per unit and the raise of performance per unit).

✓ Standardized products will influence suppliers of midrange and high-end servers and storage to lower their costs. Users of these product are looking for standardization to drive lower costs in other areas, including deployment, operations and services

For successful standardization, Toyota chairman describe it this way; "our standardized work consist of three elements: takt time (time required to complete one job at the pace of customer demand), the sequence of doing things or processes, and the volume of stock on hand of individual worker needs to have in order to accomplish that standardized work"[1]

The firm can gain a cost advantage based on these three elements or combination between them. According to Michael Porter[2] the cost advantage is related to the notion of the value chain and the relative cost of competitors because he consider the reduction of costs as a strategy for achieving the leadership in the market.

1.3. Competitive Strategies:

When we talk about competitive strategies, we must mention the various types of players in the market, for the reason that the competitive strategy varies from one position to another. Having a competitive advantage is necessary for a firm to compete in the market, but what is more important is whether the competitive advantage is sustainable, a firm must identify its position relative to the competition in the market. By knowing the positioning in the market, the firm can be one of the following types of players (leader, challenger, follower or Nicher) and based on that it can adopt appropriate strategies to compete.

The topic of competitive strategy raises many questions like:
✓ How you compete? (do you play offensive of defensive)
✓ Where you compete? (the exact identification of the market after a comprehensive analysis)
✓ Whom you are competing against? (What are the competitors measures in both offensive and defensive competition, how fast and flexibly they react).
✓ The choice of the strategy depending on firm's objectives, strength and weaknesses.

We have to define the main concepts related to this subject:

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[1] LIKER. J, DIDIER. L – (2009)Le Model Toyota : 14 principes qui feront la réussite de votre entreprise, Pearson Education, France, p.179

[2] PORTER. M –(1998)- Competitive Advantage: Creating and sustaining superior performance, The Free Press, p.64

Competitive analysis: the process of identifying key competitors; assessing their objectives, strategies, strengths and weakness, and reaction patterns; and selecting which competitors to attack or avoid.

Market leader: the market leader is dominant in its industry. It has substantial market share and often extensive distribution; it usually leads other firms of the industry in price changes, new product introduction, and technological advancement.

Market challenger: is a runner up firm in an industry that is fighting hard to increase its market share in order to become the leader eventually.

Market follower: it is a firm that intends to hold a share of the market without providing any challenge to strong competitors, usually it benefits from the previous types experience.

Market nicher: market nicher serve small segments that are of little or no interest to the larger firms this classification was made by Kotler in 1999.

Porter considers two types of competitive advantage (low cost and differentiation) and the significance of any strength or weakness a firm possesses is ultimately a function of its impact on relative cost or differentiation. I consider the technology to be independent competitive advantage for one simple reason is because if the technology among industries reaches out a considerably high level, in this case we may talk about new product, new market, and new industry structure "the ultimate competitive advantage" (case of monopoly).

Kotler in his book "marketing management" considers many factors for a competition analysis (number of sellers and degree of differentiation, entry mobility and exit barriers, cost structure, degree of vertical integration and globalization). Once a company identified its main competitors and their strategies, the firm has to deal with each one according to its position in the market.

1.3.1 Strategies for Market Leaders:

Kotler supposes that the market leader possess more than 40% from the target market, therefore he can perform the following strategies:

1.3.1.1. Expanding the total market

Usually the dominant firm benefits the most from the total market expansion by looking for new customers or more usage from existing customer.

New customers: wherever the efforts and the resources spend on marketing strategies, there is always potential buyer who are unaware of product or who are resisting it because of price or lack of certain features, so the company must identify three groups of potential buyers: those who might use it but do not (market penetration strategy), those who have never used it (new market segment strategy) and those who live elsewhere (geographical-expansion strategy)

More usage: the customer usage can be increased by increasing the level or quantity of consumption or increasing the frequency of consumption. This can be done though packaging or product design changing; larger package sizes also increase the amount of consummation.

1.3.1.2. Defending market share

The firm may lose her advantage while focusing on expand total market size, therefore it must continuously defend its market share by being always one step ahead using the advantage of continuous innovation, developing new product and customers services, distribution…according to Kotler every strategy aim three elements (costumer mind share, costumer heart share and market share), so there is six strategies for defending those shares:

Position defense: position defense involves occupying the most desirable market space in the mind of the consumers.

Flank defense: although the position defense is good approach, the leader should never let his guard down, he have to be prepared for possible invasions, for example if the competitor introduce new product in the market with lower price the leader should raise his price and put the increased revenue in the advertising or to develop a better product with lower price.

Preemptive defense: often the firm needs to be more aggressive to protect its share, by employing attacks maneuvers before the enemy starts its offense, this can be done by hitting one competitor then another, then another to keep everyone one off balance.

Counteroffensive defensive: most attacked market leaders will respond with a counterattack offensive (like invade the attacker's main territory so that it will have to pull back to defense line) this is one of the several moves in counteroffensive defensive.

Mobile defense: in mobile defense, the leader stretches its domain over new territories that can serve as future centers for defense and offense through market broadening and diversification (the company get involved in wide range of technologies associated to her business).

Contraction defense: if the company is too large to control and defend its areas, it has to reinforce the strategic activities and territories by giving up the weakest ones, few strong shares better than several weak territories.

1.3.1.3. Expanding market share

The leader can improve his profitability by increasing their market share. Generally the market share is evaluated by percentage from the target market by in financial context; one point gain in market share can be worth millions of dollars, for example in USA market, one share point is worth 48 million dollar in drink market 120 million dollar, depending on the amount of money spend in the market, but it is influenced by the demand mechanisms the market structure and the purchase power.

A study confirmed an interesting fact, when other firms in the market besides the leader conduct a marketing and advertising campaign; a part from its benefits goes to the leader. This is due to costumer mind share (each customer has his own subjective brand classification), for example if I believe that coca cola is way better than Pepsi, or local products such as TOUJA, and one of this companies made an advertise in media about how good its product, I will assume automatically that Coca-cola is better than those brands, and for that the market share of the leader increase with each promotion made by competitors.

In Algeria, the FMCG market (fast moving consumer goods) is characterized by high level of concentration, a few producers and several imported products (case of oligopoly or monopoly in some industries), difficult entry and lot of mobility barriers, a low degree of vertical integration, and almost absence of globalization. The only thing we can deduce from this market analysis is that the competitive structure is very weak and the only protection that local firms get is provided by the Algerian government (laws).

For improving the Algerian firm's competitive abilities, a diligent work is required on two levels:

I- First, as we mentioned before, we have to start with developing a sustainable competitive advantage then analyzing the market and finally learn how to use the various strategies.

II-We have to encourage the competition, it is true that it will harm many companies but eventually it will reshape and reconfigure the competitive structure and business mechanisms.

1.3.2. Strategies for Challengers

The market challenger has approximately 30% from the market share; he seeks always for increasing his market share and overtakes the leader position. There are many cases when the market challenger overtakes the leader for example: General Motors' was the leader and Toyota was the challenger, now Toyota produce and sell more cars than General Motors, British airways flies more international passengers than the former leader Pan Am.

The challenger is less powerful than the leader there for it has to define the objectives and the opponents:

- ✓ It can attack the market leader (high risk and high payoff)
- ✓ It can attack firms of its own size that are not doing the job and underfinanced
- ✓ It can attack small local and regional firms.

Choosing the opponent is very important for determine the appropriate strategy:

1.3.2.1. Choosing a general attack strategy

Frontal attack: the attacker matches its opponent's product, advertising, price and distribution. In this fight the greater manpower and resources will win. Also it can be applied by lowering the price; the only problem here is that the leader can retaliate so the firm has to make sure that the consumer does not differentiate much between the products.

Flank attack: this attack can be applied through two strategies, geographic attack (attacking the spots areas where the opponent is underperforming) and segmental (attack the under covered segments of the opponent).

Encirclement attack: this maneuver requires more resources than the other because it involves launching a grand offensive on several fronts (ex: Sun Microsystems licensed its java software to hundreds of companies and millions of software developers for all sort of consumer devices, in her fight against Microsoft).

Bypass attack: it is one of the indirect attacks; it means bypassing the enemy and attacking easier markets to broaden one's resource base. It can be applied by diversifying into new geographical markets, diversifying into unrelated products, leapfrogging into new technologies to supplant existing products.

Guerrilla warfare: it consists of small, intermittent attacks to harass and demoralize the opponent and eventually secure permanent market share.

The competitive ware between Honda and Harley Davidson lasted seven years, where Harley Davidson adopted the Guerrilla warfare and it almost won the motorcycle market if not for the big maneuver of the couple Handa-Yamaha.

1.3.2.2. Choosing a specific attack strategy

The challenger must go beyond the five broad strategies and develop more specific strategies:

Price discount: the challenger can offer a comparable product with lower price, this strategy is called "discount retailers", but as we already mentioned the challenger must convince buyers that its product and service are similar with the leaders, the buyer must also be price sensitive, and the leader must refuse to lower its price in spite of the attacks.

Lower price goods: the strategy is deferent than the previous. in this one, the challenger must offer the average and the low-quality products at much lower price.

Value-priced goods and services: usually the relation between the quality and the price are positive, but in this strategy the firm must balance between them as much as possible by producing high quality and low prices.

Prestige goods: usually the prestige goods are the specialty of the leader but the challenger can also launch a higher-quality product and charge a higher price than the leader. This strategy was applied by Mercedes on Cadillac in the US market.

Product Proliferation: the challenger can attack the leader by launching a large and various products, thus will give the buyers more choices.

Product innovation: this will give to the challenger the opportunity of entering new markets and intruding a product improvement.

Improved services: if there is not much of deference between the products, the only solution for the challenger is to provide better services to the customers.

Distribution innovation: the distribution is a powerful strategy that can be used by developing new channels of distribution.

Manufacturing-cost reduction: like porter said, a great competitive strategy can be established by what he called "cost leadership", consequently, lower price or more benefit.

Incentive advertising promotion: according to Kotler, some challengers attack the leader by increasing expenditures on advertising and promotion.

a marketing study conducted by "Francois Laurent in 2005" shown that the effectiveness of long term advertising investment are more significant for the leader than the challenger, and the concentrated media investments are more significant for the challenger, so the the first media plan (long term media and advertising investment) are more appropriate for the leader and the second media plan (concentrated media investments) fit more with the challenger.

1.3.3. Strategies for Challengers

The follower has many advantages over the leader and challenger because he will learn from the leader mistakes and take his experience; therefore, there is no need for extra costs such as the R&D, market information, innovation costs…

Many companies prefer to follow rather than challenge the market leader. The opportunity for product differentiation and image differentiation are low, service quality is often comparable and price sensitivity runs high. Usually the followers try to steal each other customers by copying the leader products, market share show high stability.

It is true that the market follower does not have many moves to win against strong competitors; however, he must know how to hold current customers and win a fair share of new customers. According to Kotler he has to develop a distinctive advantage in several areas like location, services, financing.

1.3.3.1. Followers disadvantage: the order of market entry

Many studies have demonstrated a negative relationship between the the order of market entry and the relative market share (a relative market share is the entrant's market share relative to the pioneer's market share), from those studies, Urban (1986) assessor data yield a negative relationship between the order of market entry and relative market share, where he concluded that the second entrant's market share is roughly 71% of the first entrant's.

Hila Riemer[1] mentioned in her article (market shares follow the zipf distribution) that the market share of an entrant and pioneer's share is related by a square root as shown in the following form: $MS_i = MS_1 / \sqrt{i}$ where MS_i is the market share of the ith market entrant and MS_1 is the market share of the pioneer.

This is one of the big disadvantages of being a market follower, for that reason the strategy of the follow should aim the long term goals, by powering his market share progressively and avoid the leader and the challenger moves.

1.3.3.2. Followers advantages: the low costs and the experience

Usually the follower products are high consumer products, this phenomenon reflect the low prices due to the low costs and the similarity with the leader products. For example, in the French market, the consumers prefer Cristaline water over Evian water because of the similarity in the products and the low price of Cristaline.

The follower is less dynamic so he benefits from cutting off many important costs such as the communication and the marketing costs, and because of the similarity between the products of the follower and the leader he benefits from the leader advertising and communication campaign. According to Georges Lewis he Also does not innovate so he does not bear the innovation costs.

He can minimize the risk of investment because of the leader experience and the imitation strategy.

Because the follower is often a major target of attack by challengers, it must keep its manufacturing costs low and its product quality and services high, it must also enter new markets as they open up. The follower has to define a growth path, but one that does not invite competitive retaliation. Four broad strategies can be distinguished:

Counterfeiter: the counterfeit duplicated the leader's product and package and sell it on the black market or through disreputable dealers. (Many of the Rolex products have been plagued with the counterfeiter problem, especially in Asia).

Cloner: the cloner emulates the leader's products, name, and packaging, with slight variation. For example, Ralcorp Holding Inc sells imitations of name-brand cereals in the lookalike boxes.

Imitator: the imitator copier some things from the leader but maintains differentiation in terms of packaging, pricing, advertising and location. The leader does not mind the imitator as long as the imitator does not attack the leader aggressively.

A study conducted by Mansfield, Schwartz and Wagner based on a random sample of 100 firms from twelve industries (excluding very small firms) in USA has shown that developing and introducing an innovative product increases average costs by roughly 50%. The average

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[1] RIEMER. H, SUMAN. M, DEVANATHAN S2002), « Market Shares Follow the Zipf Distribution», Numéro 2, Partie 125 Working paper (United States. Office of Educational Research and Improvement. Office of Research). P18.

time from beginning of applied research to market increases by roughly 40% and the cost of imitation represent 65% from the cost of innovation, consequently the follower can preserve 35% from the innovation costs by imitating and use it to differentiate his services of to lower the price.[1]

Adapter: the adapter takes the leader products and adapts or improves them. He may choose to sell to different markets, but often the adapter grows into the future challenger, for example the Nokla brand have improve the original Nokia product by adding the second puce location (double puce cell phone), or Mecca-cola when it produced similar product as Coca-Cola but with religious aspect and it targeted the Muslims market segment.

1.3.4. Strategies for Niche

A nicher is like a leader but in small market or a segment, smaller firms avoid competing with larger firms by targeting small markets of little or no interest to the larger firms.

For example the LOGITECH INTERNATIONAL becomes a 1.3 billion global success story by making every variation of computer mouse imaginable. The company turns out mice for left and right people, and then the company expanded into other computer peripherals, such as PC headsets, PC gaming peripherals…

The nicher is not an imitator or a copier so its strategies do not include imitating or flow other competitors' steps, he is a leader in his own market so his strategies rely on specialization by serving his segment as good as possible. Kotler describe those strategies as follows:

End-user Specialist: the firm specializes in serving one type of end-use customer. For example, a value-added reseller (VAR) customizes the computer hardware and software for a specific customer segments and earns a price premium in the process.

Vertical-level specialist: the firm specializes at some vertical level of the production-distribution value chain. A copper firm may concentrate on producing raw copper, copper components, or finished copper products.

Customer-size specialist: the firm concentrates on selling to small, medium-sized, or large customers. Many nichers specialize in serving small customers who are neglected by the majors.

Specific-customer specialist: the firm limits its selling to one or a few customers. Many firms sell their entire output to single company. Such as Sear or General Motors.

Geographic specialist: the firm sells only in certain locality region, or area of the world.

Product or product line specialist: the firm carries or produces only one product. A firm may produce only tenses for microscopes. A retailer may carry only ties.

Product-feature specialist: the firm specializes in producing a certain type of product or product feature. Rent-a-Wreck, for example, is California car-rental agency that rents only "beat-up" cars.

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[1] MANSFIELD. E, SCHWARTZ. M AND WAGNER. S (1981). «Imitation Costs and Patents: An Empirical Study» Economic Journal, vol. 91, issue 364, P.75.

Job-shop specialist: the firm customizes its products for individual customers.

Quality-price specialist: the firm operates at low- or high-quality ends of the market. Hewlett-Packard specializes in the high-quality, high price ends of the hand calculator market.

Service specialist: the firm offers one or more services not available from other firms. For example, a bank that takes loan requests over the phone and hand-delivers the money to the customer.

Channel specialist: the firm specializes in serving only one channel of distribution. For example, Soft-Drink Company decides to make a much sized soft dronker available only at gas stations.

Despite that, market niche strategies carry many risks, For instance, a market leader may choose to expand its own market coverage to serve a niche thereby negating the advantages enjoyed by the nicher, therefore the market nicher have three defensive strategies against competition:

- ✓ Creating new niches
- ✓ Expanding existent niches
- ✓ Protecting nicher

Michael Porter has described three generic strategies (differentiation, cost leadership and focus). The nicher strategy is practically the same as the focus strategy described by porter because of the similarity in many elements. For instance, the nichers target a market position that is small and unique and requires special competencies in order to be served. They rely on two aspects: increase the performance by providing a special product or services and lowing costs by serving a small part of the global market (specialization).

Now porter has described the Focus strategies as follows: "the focus strategy is focusing on a particular buyer group, segment of the product line, or geographic market; as with differentiation, focus may take many forms. Although the low cost and differentiation strategies are aimed at achieving their objectives industry wide, the entire focus strategy is built around serving a particular target very well, and each functional policy is developed with this in mind."

The niche strategy or focus strategy as described by porter are the same, but porter consider the focus as a competitive advantage and strategy in the same time, as a strategy in his book (the competitive strategy, 1980) and as a competitive advantage in the book (the competitive advantage 1985).

The ideal niche displays five characteristics:

Profitability: the niche has adequate size and purchasing power to be profitable.
Growth: there has to be reasonable potential for market growth in the niche.
Limited competition: there has to be little or no competition from major players in the industry.
Competitive advantage: it means resources and skills to serve the market better than others
Goodwill: it refers to the loyalty among customers to defend and the good and services from competition.

This subject is treated by Michael Porter from different angle; porter has described the competitive strategies in a way that can fit for any company regardless her position in the market, her business field or her competitor's strengths and weakness.

In his book "Competitive Strategy, 1980" porter has defined three generic strategies and other situation when the firm is oscillate between these three strategies which he called her "Stuck in the Middle". We already described two of these strategies (cost leadership, differentiation) in the section: competitive advantage and the third strategy is the focus strategy which is the same as the nicher strategy described by kotler. Stuck in the Middle is not a strategy, it is a situation to be avoided.

Stuck in the Middle: A firm is stuck in the middle is in an extremely poor strategic situation. This firm lacks the market share, capital investment, and resolves to pay the low-cost game, the industry wide differentiation necessary to obviate the need for a low cost position, or focus to create differentiation or low-cost position in a more limited sphere.

In the other hand, Phillip Kotler has treated the competitive strategy in a strategic military way. Many business strategists realized that there was a vast knowledge base stretching back thousands of years that they had barely examined. They turned to military strategy for guidance, for instance, Kotler is well-known for his competitive warfare strategy, he describes four types of business warfare theories in his book (Marketing Management):

• Offensive marketing warfare strategies
• Defensive marketing warfare strategies
• Flanking marketing warfare strategies
• Guerrilla marketing warfare strategies

Sun Tzu said:" if you know the enemy and know yourself, you need not fear the result of hundred battles. If you know yourself but not the enemy, for every victory gained you will also suffer a defeat. If you know neither the enemy nor yourself, you will succumb in every battle." Therefore, I chose to illustrate Kotler competitive strategies because they are more precise and every company can use them after it conducts an internal and external analysis (SWOT analysis).

1.4. Competitiveness across the World:

The competitiveness differs in level and evolution and practices from continent to continent and from region to region, and according to many literature reviews, I concluded that the competitiveness practices and strategies is significantly related to the cultural habits of both managers and consumers and I will demonstrate my point of view in the following case studies.

1.4.1. Middle East Competitiveness in the 21st Century's:

The term "middle east" was introduced in 1901 by US Admiral *Alfred T. Mahan,*it was only in 1916 that the term was popularized. Since then, it was considered as a one region characterized by a synchronized change in structure, stocks, markets and economic, even societal change, which suggest a certain degree of uniformity.[1]

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[1] ABBAS. J.A, (1999)"Middle East Competitiveness in the 21st Century's Global Market", <u>The Academy of Management Executive</u>, Vol. 13, No. 1, P.103.

The Middle East is characterized by rich natural resources however due to political and historical events the evolution of competitiveness is still slow compared to the rest of the world, when Arab states achieved independence. (Jordan, 1946; Egypt, 1956; Algeria, 1962; most Gulf states, 1971), the new governments established and then relied on the public sector to provide basic services and administer economic needs. As a result the competitiveness in the industrial sectors is still in its early beginnings, for example the great achievements accomplished by the Arabic states including the buildings, the roads, the touristic villages, are all conducted by foreign staff from the chief engineer to the skilled and unskilled labors.

The same can be observed in Algeria and the Mediterranean area, in addition to that, the absence of rivalry among companies, excessive government protection, and reliance on imported technologies contribute to the bleak state of the management of R&D in organizations. Most R&D departments in the region are not oriented toward innovation, but toward imitation. However, the management of innovation in organizations is taking priority recently because the peace process has encouraged competition among companies, governments are becoming less protective of domestic industries than before, and there is an increase in the quality and quantity of scientists and technicians. These developments are coupled with an exceptional level of commitment to work and loyalty to the organization among the workforce that could strengthen these innovative tendencies.

The Middle East case is a concrete example of competitiveness evolution, that's why we have to analyze the historical specifies of the region and the cultural structure in order to understand the main drivers of competitiveness.

1.4.2. Basis of China's Competitiveness:

The Chinese internal market is very competitive, and to understand the source of its competitiveness it is necessary to mention many factors such as production for exports, an educated labor force and greater identification of laborers in a large number of enterprises with the results of their labor are some of the factors accounting for china, however there is some remarkable note to mention in the Chinese competitive climate; it is the the villages companies.

Most of the industrial units producing low end manufactures (goods and services), they do not belong to the government or the state, nor they belong to individual capitalists, the extraordinary industrial growth is due to "Township and Village enterprises" (*TVE's*) as a short way of naming it in many literature reviews, these kind of enterprises have many advantages compared to the traditional companies and enterprises in the industrial sector, they are located on a land that belong to local authorities itself, so they are excluded from rent payments, in fact, the land in china is not a commodity yet, however the lease market is growing in a fast way which may suggest that the precious advantage is coming to an end, also, capital in china is cheaper compared to India and other countries, savings in china is more than 40% compared to 25% in India[1].

Chines economic environment is categorized with the highly efficient and appropriate environments for doing business, as it provides the basic needs for business startups, and from those basic requirements we mention:

✓ *the competitive (lower) wages:* the wages in china are considered among the lowest in the world along with the Indian local workers. For that purpose; many American and

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[1] PARKER. R.N. DENSMORE. A.L. ROSSER. N.J. DE MICHELE, M. LI, Y. HUANG, R. WHADCOAT, S. AND PETLEY, D.N. (2011) 'Mass wasting triggered by the 2008 Wenchuan earthquake is greater than orogenic growth.', Nature geoscience., 4 (7). P.524.

European firms has moved or created a local subsidiaries in china, in order to benefit from the advantage offered by the local Chinese workers.

✓ *the encouraging economic policies:* the Chinese government has a greater role in encouraging the business startups, by improving the economic and trade laws, especially the import/export laws, and with the integration in the World Trade Organization WTO the Chinese policies moved toward liberating the inner market and local (villages) industries and trades.

✓ *the self-financing policy and the strong financial system*: in that matter, the Chinese banks and financial managers, have introduced the lowest loan and bank services rates, to the end that this system attract even the American and the European investors, even the black market leaders were satisfied by the great aspect of anonymity provided by the Chinese financial institutions, and that aspect has introduced a great finance for the new investment with less procedures and lower interest rates, which pull the foreign investors from everywhere.

✓ *The Highly competitive local market:* the local Chinese markets and even the traditional ones provided an insights about what was going on outside, even the tensity of the competition and the different tactics of marketing and competitive strategies were all intruded in small geographic areas and spaces, which made the local Chinese investor more capable and efficient if he chose to invest in the European market. the local European and American goods have felt the threat introduced by the Chinese products, even the government protection policies could not prevent the Asian products and especially the Chinese ones as the Chinese investors and businessman's were able to adapt to the different circumstances, to the extent that their reaction and tactical moves were very fast and pertinent as if they have studied the local environment of each country, in Algerian markets for instance the "*SsangYong*" and "*Chery*" automobile brands are in increasing rivalry with the European products respectively to the quality and the price (low/high end goods).

1.4.3. Latin American Competitiveness (Comparative Perspective)

The most official and large research document on national competitiveness is the "*Annual Global Competitiveness Report*" produced by world economic forum (WEF), this report examines the drivers of sustainable growth and long-term economic prosperity. In that sense, the Latin American countries enjoys many natural advantages such as the agricultural climate that encourage the production of tropical fruits and extended goods in addition to other goods manufactured locally, we note also that the exercise of discriminating among economic policies requires a degree of normative judgment and risks some conceptual overlap. We do our best to present a positive analysis by focusing on the laws and regulations that merit strong academic and policy consensus as important contributors to productivity:

Table I.3: Investment Competitiveness in Latin America

Rank	Country	External	Rank	Country	Regulatory	Rank	Country	Public Investment
1	Chile	1.432	1	Chile	0.902	1	Chile	1.315
2	Costa Rica	1.031	2	Peru	0.551	2	Costa Rica	1.109
3	El Salvador	0.911	3	Jamaica	0.455	3	Uruguay	0.926
4	Nicaragua	0.732	4	Mexico	0.364	4	Trinidad and Tobago	0.721
5	Guatemala	0.697	5	Brazil	0.312	5	Jamaica	0.524
6	Bolivia	0.596	6	Panama	0.266	6	El Salvador	0.385
7	Trinidad and Tobago	0.563	7	Nicaragua	0.007	7	Colombia	0.340
8	Honduras	0.557	8	Uruguay	0.000	8	Panama	0.123
9	Uruguay	0.286	9	Argentina	−0.046	9	Brazil	0.104
10	Panama	0.150	10	Colombia	−0.035	10	Mexico	−0.047
11	Jamaica	0.101	11	Dominican Republic	−0.073	11	Honduras	−0.145
12	Paraguay	0.077	12	Paraguay	−0.087	12	Guatemala	−0.187
13	Dominican Republic	−0.344	13	El Salvador	−0.152	13	Argentina	−0.227
14	Peru	−0.372	14	Trinidad and Tobago	−0.216	14	Nicaragua	−0.389
15	Mexico	−0.436	15	Costa Rica	−0.285	15	Peru	−0.439
16	Argentina	−0.880	16	Bolivia	−0.387	16	Ecuador	−0.469
17	Ecuador	−0.885	17	Ecuador	−0.431	17	Dominican Republic	−0.562
18	Colombia	−0.915	18	Honduras	−0.535	18	Venezuela	−0.816
19	Brazil	−1.000	19	Venezuela	−0.758	19	Bolivia	−0.823
20	Venezuela	−1.299	20	Guatemala	−0.816	20	Paraguay	−1.162

Note: The indexes represent the average value of the standardized subcomponents reported in table 1.

Source: Stephen Weymouth and Richard Feinberg, "National Competitiveness in Comparative Perspective: Evidence from Latin America", <u>Latin American Politics and Society</u>, Vol. 53, No. 3, P.149

From the previous rapport, we conclude that the Latin economies developed a competitive advantage by increasing the public investment, and improve productivity. *Chile* is an example of the industrial competitiveness as it positively influenced the productivity by pursuing a set of laws, institutions and regulations that promote investment and improve productive efficiency. Economists argue about which of these institutional rules are most fundamental, but there is wide-spread agreement that productivity improves through openness to external and domestic sources of competition, the development of efficient and deep financial markets.

However, as displayed by the previous table the other countries raking high in competitiveness rapport are relatively small economies, especially in Central America, such as ((Costa Rica, El Salvador, Nicaragua and Guatemala), which prove that competitiveness is not affected by the size of the economy and in many cases proven by the rate of economic growth shown by emerging economies which will confirm that hypothesis.

From the previous section we have concluded that competition is dynamic notion in both time and place; dynamic in time means that every period has its competitive drivers, for example in the beginning of the European industrial revolution, the technology and the knowledge were the main reasons and drivers of competitiveness, in the world war I and II the production rate was boosted because of the number of labors working in the industry so in that period the workforce was the main driver of competitiveness, in a later phase the communication and marketing tactics were the reason behind the success of many multinational firms. nowadays, the competitiveness shifted from a particular industry to nation competitiveness or a geographic location "Competitive Clusters", in addition to that, the competitiveness differs in places, from a nation to nation and from an economy to another depending on many socio-cultural factors. also, a natural advantage such as the number of the working force in china or the tropical climate in Latin American for agricultural and touristic advantages, or the European accumulated civilization that shaped the industrial practices and the anticipation of future market trends.

Many conclusions were drawn from the theoretical analysis of competitiveness in the industrial field; the most important one is that the competitiveness in the industrial field is an

independent variable, which means it drive the market and the consuming trends not otherwise, in this matter we have demonstrated that the competition in that field; depends from a time perspective on innovation, productivity, working force, stimulating variables such as the world war, and from region to region it depends on; natural advantages such as regional climate and socio/cultural variables. However, what was sure from studying the numerous cases of competitiveness in the industrial field is that the market trends and the marketing methods were never part of the equation as the industrial competitiveness was the main driver of market and consumer behavior over decades.

From the European case we have concluded that the socio-cultural characteristic of the nation or the region are playing a greater role in shifting and shaping the competition ahead in higher levels, but one may argue that the united states of America is not an old civilization nor it benefits from the accumulation of years and years of learning like Europe, well this particular case is a special one, or an exception as it was mention earlier, USA has benefited from a great occasion and opportunity which was the world war, in addition to the natural advantages, the great managers and business men during the post war, were all a veterans and they introduced the knowledge and the discipline to the industrial field along with the greater minds of Europe after the collapse of the German nation and its allies. In Asia, and specifically china, the method of village enterprises was an innovative idea that benefited the country and boosted the Chinese productivity to a remarkable level.

CHAPTER

TWO

Chapter 2: Entrepreneurship in Algerian Small and Medium Enterprises

The Algerian investment climate is characterized by high percentage of small and medium enterprises, and in particular micro enterprises, for many years the the small and medium enterprises has been ignored by the government strategic and economic policy, the industry was and still by far the most important concern of the policy makers in Algeria, for that reason and other reasons that will be presented in this chapter, the small and medium enterprises were rarely evolved in the national market; let alone the international one, even the artisanal shops has never granted the green light to export some of the most traditional and the original products and crafts by providing a mechanism to contribute in the international cultural and product exhibitions. In that economic environment the small enterprises has never evolved to a much more organized and bigger enterprises, the lack of competitiveness and the absence of sophisticated demand has made the local market very stagnant, I will present in that chapter the most recognized characteristics of the Algerian local market and describe with pertinent data and evidence the value of each type of enterprises and its contribution to the global economy.

In this chapter we will present a summary of the entrepreneurship theory, we will also discuss the investment climate for the foreign companies and how they operates and view the local national market, especially for those whose contracts don't include the Algerian government as a partner which make their opinion a non-bias one, alos try to investigatge the existence of favoritism in the treatment of those types of companies, how do they evaluate the local economic and investment environment. The second point in this is the ranking and the analysis made by the world economic organization, concerning the Algerian investment and economic environment, how do those reports describe the Algerian investment climate, we will focus on the most two popular and recognized reports on that matter; the first is the world bank reports and the second is the world competitiveness reports, those data reports will provide us with much more comprehensive understanding regarding the pitfalls of the Algerian investment climate.

Also, we will illustrate some of the most important and recent statistics about the SME's existence, starting and evolution, it is my main concern to find out why is 97% of SME's are micro enterprises and why do they still micro enterprises after many years of experience and existence, why do they never evolve to much bigger organized enterprises, to answer that question we have to explore the entrepreneurship theory as it was seen by economists and field experts, and then we will focus on the similarities and differences in both the academic theory and actual data from experienced entrepreneurs in Algeria.

2.1: Overview of Entrepreneurship

Understanding Entrepreneurship is to understand the mechanisms of a developing economies and how to evolve to the next industrial stage as most of the developing countries lack the pertinent tools and the business fabric to make a mature entrepreneurial culture among young engineers with new ideas in the someway we have to define the roles of banks by venture capital and the role of risk management experts.

2.1.1: Entrepreneurship Definition

Understanding the concept of entrepreneurship cannot be achieved though simple synthesis of definitions developed by several managers. Each author explains it in a different way the concept and how it relates to the actual practice of entrepreneurship. It is for this reason

that it is interesting to describe in the following points; the evolution of the theory of the entrepreneurship. The concept of entrepreneurship has evolved greatly in time and space. There are several theories that are related to the entrepreneurship, each one relying on a particular aspect of the concept. We will try to expose the most popular ones:

2.1.1.1. Entrepreneurship in the Classical School

The classical economists do treat the subject of either the firm or of the entrepreneur as a principal factor in economic development, as a result, their macroeconomic analysis try to explain the movement of the economy, how wealth is produced and how it flows. according to the physiocrat F. Quesnay, the entrepreneur is part of the sterile class or a nonproductive one due to their role in economy, in that matter the entrepreneurs does not create wealth but it just makes it circulate[1].

2.1.1.1.1 the Entrepreneurship According to Cantillon

The entrepreneur introduced into classic economy thought Richard Cantillon (1726). According to this author, a company is driven by its creator, which cannot predict sales or prices, not the characteristics of its internal and external environment; this implies that many of those consequences will affect the purchasing behavior of customers. Long before "Say" and "Schumpeter", Cantillon has already initiated its first theory of the company that explains such economic and social behavior by its new introduced analysis: "*the company is led by an entrepreneur, characterized by a fundamental and irreducible uncertainty*". However, Cantillon defines the entrepreneur by its ability and aptitude to confront the factor risk, that being said, there is no guarantee of what the outcome will be according to his decision, that the fundamental risk factor that an entrepreneur may face. "*The one who is knowingly and willingly accepting the risk and assume its outcomes is the one that can be defined as an entrepreneur*"[2].

2.1.1.1.2 the Entrepreneurship According to Adam Smith

Fifty years after the work of Cantillon, the arrival of Adam Smith with his work";" an inquiry into the nature and causes of the wealth of nations" in (1776); which was notably famous by the presence of self-interest notion and the absence of enterprise concept. For him, there are only selfish individuals where each and every one of them seek to fulfill his personal interests and that is what a collective work is based on, there is group thinking or goals other than our personal ones by consequence no enterprise concept consistent with the modern management definition, There is only one market that connects individuals in a common trade. The man employs his capital only in order to receive a profit. He always uses his capital in activities and trades in which the product will gain him the maximum profit. The selfishness of this entrepreneur is justified by the fact that the entrepreneur does not seek to serve the public interest, but he thinks only of fulfilling his personal needs such as a greater personal safety both financially and socially and by directing his industry so that his product has the most of possible value.

2.1.1.1.3 the Entrepreneurship According to Say

John Batist Say, Cantillon and Schumpeter, are the three founding fathers of the economic theory of the entrepreneur. Say defines the entrepreneur as the middleman or the intermediary between the scientist who produces knowledge and the worker who applies it to industry, his goal is to increase production and maximize profit. The entrepreneur is the farmer,

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[1] Boutillie. S, Uzunidis. D (2017) -L'entrepreneur: La fonction économique de la libre entreprise, ISTE Group, 1 mai 2017, p.47.

[2] BERBER. N, (2014)« L'entre preneuriat en Algérie », Magister Thesis in managment - strategy, doctoral school ,institute of economy and management, oran university, algeria, 05 Mars, P.10-15

the manufacturer or the trader who "*accepts to create a product for his personal profit knowing and assuming the risks* ".

2.1.1.2. Entrepreneurship in Modern Management Theory

The period of industrialization was characterized by highly and rapidly evolving factories, and industries, and the introduction of labor division idea which facilities the mass production in order to achieve economies of scale. This period was known by the birth of the scientific planning of work founded by Taylor based on his notions of labor division; which was basically the main engine for modern industry and standardization approach known in nowadays f into elementary spots and specialization of the workforce.

2.1.1.2.1 the Entrepreneur as an engineer

The entrepreneurs of that period were generally engineers, most of them were trained in the technical colleges, they had neither management skills nor training in commerce, or in finance or any related economic education. They had little accounting courses sufficient to run their business and follow the daily financial operations. They had a purely technical training based essentially on mathematics. It is for these reasons that Fayol proposed to introduce administrative courses into school curricula, according to him the practice of business is not sufficient to form the managerial capacity. However, the training of entrepreneurs plays a very important role in their success. Entrepreneurs sought a purely productive rationality and efficiency, as in Taylor's case, or a managerial efficiency in Fayol.

2.1.1.2.2 the Entrepreneurship According to Schumpeter

In managerial theory, the entrepreneur was replaced by the concept's shareholder, manager, the concept was renewed after that by Schumpeter to become more precise and specific about whom we call an entrepreneur. Considered the father of the field of entrepreneurship, Schumpeter finds that the entrepreneur is the key figure in economic activity. The entrepreneur is an economic agent as the economic theory defines, his function is to innovate and find new combinations of production factors using other elements rather than the land and the work as smith implied (classical theory). According to Schumpeter;
The entrepreneur is the engine of technical progress. "*An entrepreneur is a person who is willing and capable of transforming an Idea into a successful innovation and eventually a business or organization* ", according to J. Schumpeter, only an individual capable of innovating is worthy of the name of "*entrepreneur*", due to their exceptional capability of imagination and courageous Initiative along with willpower and financial support.

The entrepreneurs can ensure the passage between the scientific world of discovery and inventions and the economic world of innovations or the end consumer market as simplified term. J. Schumpeter sees the entrepreneur as one who plays a dynamic and a central role in revolution and the development of capitalism through the ages. the role of reforming or Revolutionize the production routine by exploiting an invention or, more generally, a Unprecedented technical procedure is the responsibility and also the principal characteristic of an entrepreneur, since he risks his money to produce and sell something else, the process of innovation is also a process of destructing the less innovating firms in highly competitive market, which is known as the "destructive competition"[1]

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[1] BERBER. N, (2014)« L'entre preneuriat enAlgérie », Magister Thesis in managment - strategy, doctoral school ,institute of economy and management, oran university, algeria, 05 Mars, P.10-15

2.1.2. Entrepreneurial Types

According to Alan L (2007) there are primarily four types of entrepreneurs, although one of theme is a managing entrepreneur, those types was concluded according to years of observation and many empirical studies:

2.1.2.1. The Achievement Entrepreneur

This type of entrepreneur typically associated with being high in the need to achieve. These individuals are frequently portrayed as having tremendous energy and a propensity to take charge. They are never the ones to let something just happen but in fact take initiative. As they are often leaders with a strong sense of personal responsibility, they have a strong commitment to their organization and believe they control their own lives. These individuals, because they believe they can do almost anything, wear many hats in their ventures and try to be good at lots of things. While these may seem to be the characteristics of the idial entrepreneur, the person may not always be really good at everything and not always the best team player. This is critical as evidence over the years show that fast-growing firms require fast-Growing entrepreneurial teams.

2.1.2.2. The Salesman Entrepreneur

He is the one who uses people skills and the "soft side of management". These individuals are exemplified as possessing feelings for other people's needs and wants. They typically use the soft-sales approach when pursing their venture and actually prefer spending time selling and letting someone else manage the business. While this may seem a hands-off entrepreneur it is actually a critical style when one is trying to develop products or services customers want and need, and is certainly critical if the firm's success requires marketing and sales expertise, as in retailing, hospitality, or service-based industrial sectors.

2.1.2.3. Technology Entrepreneur

He is called also the idea developer. These individuals often invent new products or services, new niches, or develop new processes for existing products. As individuals they are drawn to the word of ideas. Most likely, because of their analytic intelligence, these individuals take calculated risks. However, they can be frequently idealistic. Analytic intelligence allows them to think their way through situations. This works as long as there is not a 'bear chasing you".

2.1.2.4. The Manager Entrepreneur

He likes and tries it take charge. This type is highly competitive and is not always the most cooperative or a team player. They are usually positively disposed to those with authority, such as a board of directors or external investors. They seem to genuinely enjoy power and prefer larger organizations to entrepreneurial firms. These individuals are frequently effective marketers; but not always great personal sales people. When they do sell they use logic and persuasion to sell. Their real strength is in a managing the existing firm. In other words, they possess qualities that are often defined as management skills.

2.1.3. Entrepreneurial Characteristics

There are many characteristics and personal traits that one can find in a successful entrepreneur such as[1];

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[1] https://www.business.com/images/content/58a/d9f1f2f87b1207f720c3d/0-0-/ (consulted in 20/08/2019)

2.1.3.1. Confident

Confidence is a hallmark of the entrepreneur. Not all of us are born with confidence, but that does not mean we are not capable of it. Many confident women and men gain their sense of self-esteem and faith in their ability to greet challenges by acting – even when they lack the confidence and then gaining strength and belief in them by seeing the results and gaining the praise and respect of others.

2.1.3.2. Feels a Sense of Ownership

Taking responsibility for getting things done and doing them with care and attention – means to act like an owner. Rather than viewing a problem as someone else's, the entrepreneur sees it as his or her own and takes pride in finding a solution, leaving things in better shape than they were before encountering them, and improving upon situations rather than leaving them unattended. While a sense of ownership makes for a stellar employee, the

Entrepreneur knows that the goal is not to be owned by the enslavement of too much responsibility. Rather than controlling situations in an attempt to possess them, the entrepreneur teaches other people how to take charge. In that way the clever entrepreneur uses individual accountability in the ultimate pursuit of profitability, teamwork, and overall success.

2.1.3.3. Able to Communicate

Entrepreneurs recognize that the most important part of any business is the human element. Human resources – whether in the form of clients, employees, or strategic partners – are what makes or breaks a business, and communication is the key to successful relationships with people. The entrepreneur works to hone communication skills, whether those are written, spoken, or non-verbal messages conveyed through body language. And to support communication, he or she will take advantage of all available tools and resources. Those might include foreign language or public speaking classes, computer and telecom technology, search engine optimization or neurolinguistics programming as it relates to sales and marketing, or specialized writing such as that needed for grants, business proposals, mission statements, or policy manuals. Above all, the entrepreneur develops a keen ability to listen and hear what others are trying to say, because the best communicators got that way by first being the best listeners.

2.1.3.4. Passionate about Learning

Entrepreneurs are often "autodidactic" learners, which means that much of what they know they learned not in a formal classroom setting but instead on their own by seeking out information, asking questions, and doing personal reading and research. They also are quick to learn from their own mistakes, which mean they are less prone to keep repeating them due to arrogance, ego, or blindness to one's own faults, shortcomings, or errors in judgement. To teach is to learn. And to lead, train, and impart experience to others the entrepreneur is constantly striving to learn more and get better educated. Because of the passion for education, true entrepreneurs surround themselves with people who either know more than they do or know things that are different from what they know. They entertain the views of others and perspectives that may be unlike their own, for instance, in order to be better students of human nature. In this way they continue to enrich themselves with knowledge while also making a concerted effort to grow that knowledge by sharing it with others who are also front row students of life's valuable and unlimited lessons.

2.1.3.5. Team Player

They are those who go into business for themselves but do not utilize teamwork wind up without the team but still have all the work to get done. They shoulder the whole burden for themselves, and wind up just trading their old job for a new and more demanding one – in an attempt to be self-employed. But the new venture carries greater personal and financial risks. On the other hand, team players know how to succeed by employing the physics of interpersonal synergy and dynamic relationships. One twig can be easily snapped, but a bundle of those small

twigs becomes stronger than the sum of its individual parts and can be impossible to bend, much less break. The same goes for businesses, and successful entrepreneurs leverage teamwork to get the heavy lifting done without breaking stride.

2.1.3.6. System-Oriented

Like mathematical formulas, good systems allow us to reproduce great results every time – with less and less exertion of energy or resources. Entrepreneurs rely upon systems before they rely upon people, and they look for system-based solutions before searching for human resource solutions. If the person gets the job done but falls sick or leaves, the job is threatened. But if a system is created to get the job done, anyone can step in and follow the blueprint to get the desired result. Similarly, when troubleshooting and problem solving, the entrepreneur will first examine and study the system – because a flaw in the system will produce a flawed outcome each and every time. Designing, implementing, and perfecting systems is one of the most useful and rewarding skills of an entrepreneur.

2.1.3.7. Dedicated

Entrepreneurs dedicate themselves to the fulfillment of their plans, visions, and dreams, and that tenacity of purpose generates electricity throughout the whole organization. One of the biggest reasons that companies fail is because they lose focus. Target a goal, clarify the objective, refine the brand, and narrow the margin of error. Regardless of what the effort might involve, an entrepreneur brings a single-minded dedication to the task by being committed to a positive outcome and ready and willing to do the needful. No matter what that might mean in terms of rising to meet a challenge or acting above and beyond the call of duty, the entrepreneur shows steadfast dedication.

2.1.3.8. Grateful

Being grateful for what we have opens us up to receive more, and one reason that is true is because those who are grateful appreciate what they are given. They respect it and nurture it. They do their best to make it grow instead of allowing it to dwindle away due to neglect. Entrepreneurs learn to take nothing for granted in this world. That gives them the agility and flexibility to adapt to changes and demands, while it also invests in them a thankfulness that reminds them that riches and wealth are not about "stuff", but are about fulfillment, satisfaction, and the pleasure that comes from one's accomplishments and contributions.

2.1.3.9. Optimistic

A positive outlook is essential for the entrepreneur, who learns to see setbacks as bargain priced tuition for the valuable business lessons gained through firsthand experience. Past shortcomings, failures, or disappointments are relegated to the past so that they cannot continue to haunt the present or obstruct the future. And when things go right and business prospers, this further fuels the optimism and positive mindset of an entrepreneur, helping to give impetus and momentum for greater accomplishments and increased hopefulness.

2.1.3.10. Gregarious

Because business is all about people, entrepreneurs tend to be socially outgoing. They get excited about sharing ideas, products, and services, and that excitement is contagious to their employees, clients, friends, and other contacts both within and beyond the business sphere. But women and men who work hard as entrepreneurs also relish the unique opportunity to have fun doing something that they love as their primary vocation. Human resource experts, career counselors, and business psychologists all agree that those who do jobs they enjoy and are good at have higher rates of success and broader measures of satisfaction. Entrepreneurs know that firsthand, from their own experience, and they tend to be a fun-loving group of people both on and off the job.

2.1.3.11. A Leader by Example

Entrepreneurs not only lead themselves through self-motivation as self-starters who jump into tasks with enthusiasm, but they are also skilled at leading others. They know the importance of teamwork, and they understand the need to appreciate others, support them, and reward them accordingly. True leaders do not become indispensable, otherwise things fall apart in their absence and they can never rise to the highest level of entrepreneurial freedom and prosperity. Neither do they squander the potential of those working under their guidance. As renowned business consultant and retired United States Air Force Major General Perry M. Smith once wrote, "Leaders who share their power and their time can accomplish extraordinary things. The best leaders understand that leadership is the liberation of talent; hence they gain power not only by constantly giving it away, but also by not grabbing it back."

2.1.3.12. Not Afraid of Risk or Success

Many people could be successful if they only took chances. And many people who do take chances and become somewhat successful find the realization of their dreams an overwhelming possibility, so they sabotage their continued success by retreating back into a comfort zone of smallness. As discussed earlier, the employee mindset is preoccupied with a need for security. Those who cling to what is familiar to them – even if it means the denial of their dreams – lack the perseverance and ambition that the real entrepreneur exhibits. Entrepreneurs are not immune to fear. But they prioritize their approach to life so that the fear of failure, frustration, boredom, drudgery, and dissatisfaction far outweighs the lingering fear of success.

2.2. Overview of Small and Medium Enterprises

Both entrepreneurship development and SME have been globally acknowledged as instruments for achieving economic growth and development as well as employment creation No wonder they have been given serious attention in many parts of the world as well as in the academic field. Countries such as U.S.A, UK, Malaysia, Indian, China, Singapore, Thailand, Vietnam and a host of others have continued to emphasize on the important of entrepreneurship development. For example, reported that there is no doubt that the field of entrepreneurship development has saved "wealth" amounting to and has increases above $440 million with above 75% of those funds collected as of 1987 in U.S.A. In country like Nigeria, the important of entrepreneurship development cannot be undermined. Its contributions are quite obvious and visible in economic. This is more reason why almost every successive government continued to emphasis on it.[1]Small and Medium Enterprises definition

2.2.1. Small and Medium Enterprises Definition

In this section, SMEs are examined within the perspective of firms and businesses and not their sizes or their economy importance or how many employees they can absolve according to *Esuh Ossai*[2]. From the same reference, we will illustrate many summarized informations about small and medium enterprises; First, the term SMEs is an acronym for "small and medium scale enterprises". In this case there are firms or businesses which are small and medium in sizes. They are firms or businesses arising as a result of entrepreneurial activities of individuals. Several definitions and meanings of SMEs exit. This is due to their global diversity and characteristics (Darren et al. 2009). Arowomole (2000) affirmed that a single universally accepted definition of SMEs has not been easy as different countries have different criteria for

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[1] OSSAI. E LUCKY. I, (2012) « Is Small and Medium Enterprise (SME) an Entrepreneurship? », International Journal of Academic Research in Business and Social Sciences, January, Vol. 2, No. 1, P.343-490

[2] Ibid, P.343-490

defining SMEs. Adding that many countries have defined it in terms of manpower, management structure and capital investment limit. He further noted that experts in this field have also contributed to the diversity in SMEs definitions. One crucial thing to note about SMEs definition is that certain criteria have been used to define what SME stand for most especially according to countries, sizes and sectors.

According to the Algerian law, particularly, the Investment Development: (ordinance No. 01/03) and the Law Guidance on the Promotion of SMEs (No. 01/18); SMEs, regardless of their legal form, are defined as "any business producing goods and services and employing 1 to 250 persons, with annual turnover not exceeding 02 billion DZD or total balance sheet not exceeding DZD 500 million." And the following table will define the details of this definition;

Table II.1: SME's definition according to Algerian law

Business Size	Number or Employees	Total Turnover (DZD)	Total Balance Sheet (DZD)
Micro	1 - 9	≤ 20 million	≤ 10 million
Small	10 - 49	≤ 200 million	≤ 100 million
Medium	50 - 250	100 million - 2 billion	100- 500 million

Source: Law Guidance on the Promotion of SMEs (No. 01/18)

Conrad and Darren (2009) explains that the more reason why SME definition varies particularly from industry to industry; county to country; size to size and number of employees to number of employee is to reflect industry, country, size and employment differences accurately. Baumback (1983) defined SME in terms of employment, asset value and dollar sales. According to Jasra, Khan, Hunjra, Rehman and Azam (2011), Small and Medium Enterprise (SME) represent a business and not a public limited company. They are businesses having not less than 250 workers in the case of manufacturing. and service industries including trading businesses, and they should be able to meet any of the following conditions: 1. A trading / service concern having total assets at cost in which land and building up to Rs 50 million is not included. 2. A manufacturing unit having of total assets at cost up to Rs 100 million without land and building. 3. Any concern of service, trading or manufacturing with net sales less than Rs 300 million as per current financial statements. The points highlighted above bear witness and demonstrate that the common criteria for defining SMEs include: employment, number of employees, size, industry, country, asset value etc. This is consistent with Darren et al. (2009). They contended that the most valid measures for defining SME are number of employees and size. Generally, SME sector is categorized into three: micro, small and medium enterprises or businesses. The micro SMEs are the smallest among the three categories.

According to Darren et al. (2009), they are the businesses that employ up to 9 employees in UK while in Australia; they employ fewer than 5 employees including non-employing businesses. U.S. Census Bureau which tends to categorize business micro business as "SOHO (meaning small office- home office), non-employer business and non-employee business (including business less than 5 employees). Therefore, micro-business should be seen as the small type form of SME that may employ fewer than 9 employees or on the other hand may not have employees at all. The small businesses are business bigger than the micro-businesses in

terms of size, number of employees, structure, capital investment and economic contributions. With regard to small businesses, several definitions of small businesses have been advanced over the years.

According to Alarape (2008), it is "an enterprise with a labour size of 11-100 employees or a total cost of not less than N50 million, including working capital but excluding cost of land". The Nigerian industrial policy defined SMEs as industries with total investment of between N100, 000 and N2 million, exclusive of land but including working capital. One of the most popular definitions of SMEs is given by the American Small Business Administration (SBA) as that business or firm which is independently owned and operated, it is not dominant in its field and meets the criteria for the SME business administration sponsored loans programme (Arowomole, 2000). The Medium businesses as the name suggests are bigger than both micro and small businesses in terms of operations, manpower capacity or number of employees, structure, capital investment and size. According to Darren et al. (2009), they are the businesses that employ up to 249 employees in UK, in European Union, they employ up to 250 employees, in Australia, they employ up to 200 employees wile in U.S.A, they accommodate up to 500 employees. In Malaysia, a new definition of SME has emerged. [1]

2.2.2. The Importance of Small and Medium Enterprises[2]

Many researchers confirm the predominant role that SMEs play, in that they account for the largest share of both employment and job creation. This is true for developing and developed countries alike, although the share of employment varies considerably between countries. In contrast, the productivity of SMEs is on average a third, and wages half, of the level in large enterprises.

2.2.2.1. Contribution of SMEs to employment

The contribution made by SMEs to employment was analyzed in a study by Ayyagari et al. combining different waves of the World Bank Group Enterprise Surveys. 2 Their data include information for 99 countries covering the period from 2006 to 2010, making this the most comprehensive study to date. However, one limitation of the study is that it only covers the formal non-agricultural private economy and excludes micro-enterprises. Thus, a large number of SMEs are not covered by the analysis presented here. 3 In a study by the ILO and the German Agency for International Cooperation (GIZ), 4 the data from Ayyagari et al. were further analyzed to estimate the share of employment of the SME size class in developing countries. The results show that SMEs have a large share of employment in all countries, irrespective of the countries income level or region, and is especially high in developing countries. The median share of employment of the SME size class is 67 per cent. No disaggregation by main sectors is available. The evidence also confirms that SMEs have a majority share in employment in member countries of the Organization for Economic Co-operation and Development (OECD). 5 A sample of 18 OECD countries shows that SMEs, including microenterprises, account for 63 per cent of total employment, with large enterprises accounting for the remaining 37 per cent.

2.2.2.2. Number of Small and medium enterprises in the total enterprise population in the informal economy, and those owned by women

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[1] OSSAI. E LUCKY. ibid, P.343-490

[2] Report IV, International Labour Conference, 104th Session, 2015, p.14

SMEs account for over 95 per cent of all enterprises in OECD countries. 6 It is estimated that there are 420 to 510 million SMEs worldwide, of which 9 per cent are formal SMEs (excluding micro-enterprises) and 80–95 per cent are in low- and middle-income countries (see figure 2.3 and table 2 below). According to ILO statistics based on data from 40 countries and limited to non-agricultural employment, there are approximately 375 million people in informal employment (29 per cent of whom are women and 71 per cent men). Of these, 156 million are self-employed in the informal economy and form part of informal enterprises (34 per cent women and 66 per cent men). 7 Despite a lack of detailed data on informal enterprises 8 and variations in the definitions of informality, it is clear that the number of informal enterprises is high and that they account for a large share of all SMEs. In some developing countries, informal SMEs far outnumber formal enterprises of the same size. India, one of the few countries with reliable data on informal enterprises, reported 17 unregistered SMEs for every registered SME in 2007.

2.2.2.3. Enterprise size and job creation

Beyond their predominance in the share of employment and number of enterprises, SMEs also play a critical role in the job creation process. The direct net job creation of SMEs can be analyzed at the level of enterprise size classes. Net job creation is generally understood to be the difference between the jobs created by new or existing enterprises and the jobs destroyed either through contraction of existing enterprises or through business closures. Thus, the figures cover entries and exits of enterprises, unless specified otherwise. For the majority of countries, more than 50 per cent of total net employment creation can be attributed to the smallest size classes of enterprises of between five and 99 employees. This finding holds for each country income group however, no disaggregation by sector is available. As for enterprises with up to 250 employees, there is no unbiased global data. Nevertheless, it can be assumed that the net employment creation of the entire SME segment is significantly higher than the above figure. Data from the EU show that 85 per cent of net employment creation is attributable to SMEs with between one and 250 employees, including enterprise entries and exits. During times of economic downturn, the picture changes, Employment in SMEs seems to be less resilient to economic crises. the EU reports show that during the Great Recession of 2007–09, the number of jobs in SMEs fell by an average of 2.4 per cent annually, as opposed to 1 per cent in large enterprises. While the employment share of SMEs, as well as their share in net job creation, differs only moderately between low- and high-income countries, there is a strong variation in entry density. This ranges from 0.4 in low-income countries to 6.4 in high income countries. Entry density may well be a better reflection of the level of entrepreneurship and dynamism in an economy than data on the share of employment or job creation attributable to SMEs, and shows a greater covariation with income level there are also important differences in job growth across regions. In South Asia, there is a low share of job creation by larger enterprises. In Africa, the majority of job creation is by the smallest enterprises (less than 19 employees), whereas in Eastern Europe/Central Asia and Latin America, more than 40 per cent of job creation comes from enterprises with more than 100 employees. In East Asia and the Pacific, job growth is concentrated mainly in enterprises with 20–99 employees.

2.2.3. The Characteristics of Small and medium enterprises

We found many literature references talking about the characteristics of small and medium enterprises from different points of view, some talk talk about logistics in SME's other

talk about the characteristics of SME's from the management perspective but we chose a selection that is close to our need for this subject of research according to *René Gélinas & al[1]:*

2.2.3.1. Small and medium enterprises in modern management

The entrepreneur is a key figure in small business operations. Because of this, and because SME structures often are simpler than those of LMEs, the owner–manager is more likely to be in direct contact with the firm's operational functions, which can be an advantage in logistics integration. In addition, however, the owner– manager is also the person who develops and carries out visions, translated into objectives postulated that entrepreneurs have a high need for achievement and success; are creative; show a lot of initiative; have confidence in themselves; are courageous; have a high need for independence and autonomy; are motivated; energetic, and committed; and enjoy moderate risks. On the other hand, they find it difficult to delegate and consult, and they tend to concentrate on effectiveness, not efficiency, to identify and to exploit the firm's potential, to identify possibilities rather than problems, to adapt to the environment by anticipating changes, and to manage by priority. These objectives, along with the attitudes and behavioral trends of the entrepreneur, can have an impact on logistics integration mechanisms. Some recent studies have highlighted the importance of factors such as a gradual process, participatory management, the use of outside expertise and the use of decision support systems. Generally speaking, however, logistics integration can benefit from the objectives of sustainability and growth pursued by entrepreneurs seeking to adapt to their environments and to anticipate future changes. In addition, for entrepreneurs seeking effectiveness rather than efficiency, it always is possible that attempts at logistics integration will be driven more by the possibility of quick profits than by a systemic development strategy based on integration mechanism success factors. On the other hand, the need for independence and autonomy, combined with a low propensity to delegate and consult, may be obstacles to the introduction of success factors such as participatory management, the use of a decision support system, or the use of external expertise for logistics subcontracting. With regard to this latter point, found that nearly 68 percent of their respondent LMEs used logistics providers to obtain a competitive advantage, compared with just 48 percent of SMEs.

2.2.3.2. Small and medium enterprises and specialization/ Formalization

Today, LMEs have a number of limitations due to the effects of gigantic size—lack of flexibility, irreversible production capacities, and extensive bureaucracy, among others. These effects, linked to rigorous market segmentation and to the speed of change made necessary by quick transformations in the needs of downstream markets, explain the importance of SMEs in the economies of industrialized countries. For logistics integration, the flexibility of SMEs is a clear advantage, because in operational terms it is one of the most important integration mechanisms (small batch production, low costs, short setup times, versatility). Indeed, it long has been acknowledged that SMEs are more flexible than LMEs and that they are able to adapt better to environmental changes and disturbances). SME flexibility also can have an indirect favorable impact on logistics integration by acting as a counterweight to the stronger position of the LME in its relationship with the SME. If the LME cannot acquire the internal flexibility and reaction capacity it needs easily, it still can do so—and increasingly is inclined to do so— by forming a network (supplier SMEs and subcontracting SMEs) that will generate externally what cannot be produced internally. This synergy is a success factor in a global logistics vision. With regard to formalization, very few authors have examined the differences between SMEs and LMEs from the logistics standpoint. However, it is reasonable to think that fewer SMEs

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[1] GÉLINAS. R AND BIGRAS. Y, (2004) « The Characteristics and Features of SMEs: Favorable or Unfavorable to Logistics Integration?», Journal of Small Business Management, P.268-271

will have formalized their logistics activities. In the study by, 78 percent of firms with no formal logistics function were small, and only 0.5 percent were LMEs; similarly, 18 percent of firms with logistics departments were small, and 41 percent were LMEs. Size also has an impact on decision making. In organizational terms, SMEs have smaller, more independent management units that tend to be immature and dependent on the experience.

2.2.3.3. Small and medium enterprises and Strategic planning

The strategic framework of SMEs is based on reaction and adaptation to the environment and on their perception of anticipated changes over a short planning horizon. Their strategies are often intuitive and opportunistic, illustrating the entrepreneur's step-by-step approach and the firm's flexibility have confirmed that this strategic framework is a disadvantage, since it means that SMEs forced to consider logistics integration often have a limited planning strategy for implementing integration mechanisms. This is likely to have a negative impact on their assessment of the consequences of changes caused by logistics integration, giving them only a partial vision of its consequences. Indeed, showed that 76 percent of firms that planned their logistics activities in the short term (three months or less) were SMEs, while 48 percent of those that planned their logistics activities in the longer term (more than a year) were LMEs. Another feature of strategic planning in SMEs is its incremental nature and its dependency on the owner–manager's. This, combined with a relatively short strategic planning horizon (two years or less), could have a positive impact on logistics integration, since the SME probably will adopt a natural step-by-step approach and will take action within a relatively short timeframe. However, it also could have a negative impact due to a mismatch between the strategic planning timeframe and the actual time required to implement the integration mechanisms. For SMEs whose management methods are often more analytical than systemic, the logistics integration process may require a planning horizon that far exceeds the owner–manager's development vision. For example, case studies carried out by the Bombardier Chair in the Management of Technological Change in SMEs have suggested that five years would be a realistic planning horizon for SMEs beginning their transition to just-in-time—assuming that just-in-time is a logistics integration mechanism. This difference between strategic and actual time suggests that some small firms may be unrealistic when estimating the time required to obtain a return on their investments.

2.3. Algerian investment Climate

We will describe the principal component of the Algerian economic and investment climate, and we will present the negative and positive characteristics in their development context based on official statistics and data analysis;

2.3.1. SME's Innovation & Development in Algeria

For a very long time, in Algeria, the SMEs were neglected due to many resent in which the most important was the focus on building a big national enterprises capable of worldwide competitiveness without thinking of the process of nurturing the small enterprises to face the daily national market challenges to finally be ready to enter the international market, it is the process of growing which was most important in economy due to the implication that this process bear such as flexibility, competitiveness and experience gained though national competition, it the focus of nowadays management but unfortunately not the focus of Successive governments. the public authorities greatest economical concern at the time the big organizations, The state has considered the public enterprise as the most pertinent tool to achieve its short term goals and implement its economic policy. In Algeria, as in other countries, small and medium-sized enterprises are the majority comparing to other types of enterprises. The creation of SMEs has continued to increase in Algeria, especially since 2000, due to the

accompanying measures provided by the Algerian State. Small and medium-sized enterprises play an important role in economic life; they are considered the principal future income producer, also a driver for social stability and economic balance, they are counted on to fulfill the social needs in the long run, also Algeria feed the ambition to increase its economic growth and reduce the unemployment rate using SME's.

2.3.1.1. SME's Overview in Algeria

Since 2009, Algeria has opted a new strategy that aims to creates a maximum number of small and medium enterprises, the principal goals of that strategy articulate around three axis; the first is a political one, to ensure the endorsement of the people and guarantee the overall social stability especially taking into account the events in the region countries, or was what is called "the Arab sprint", distributing medium loans merited to the short run was a way of presenting its fair distribution of wealth to elevate the social index and avoid a similar events. The second vector is to substitute the oil and prevent ot from overtaking the national economy as is is was the weakness that made the economic independence incomplete, and lastly, it was a way of providing new jobs that government enterprises can't afford especially in the time that demographic growth was raising each year.

2.3.1.1.1 Definition of SME's based on the number of workers

Small and medium enterprises are defined by two principal factors; the number of employees and the annual revenue, each criterion can be used alone to determine the type of enterprise. However, the most used criteria is the number of workers that are affiliated in a direct way in the enterprise payroll, based on that, we will define each type according to the previous criteria;

Micro enterprise; is ab enterprises that employs from 01-09 workers including logistic and administrative workers;
Small enterprise; is ab enterprises that employs from 10-49 workers including logistic and administrative workers;
Medium enterprise; is ab enterprises that employs from 50-250 workers including logistic and administrative workers;

Note; in some academic references, the small enterprise can encompass the micro enterprise, which means that the small enterprise is any enterprise that employs between 1 and 49 worker which means that the micro enterprise category is implicitly included in the small entreprises category.

2.3.1.1.2 Institutional framework for SMEs

Two main periods characterize the institutional, administrative and legal framework In which the national companies have evolved since the independence. The first, which lasted until 1982, was characterized by a very small and uninfluential private sector represented by micro enterprises active in the artisanal activities and homemade manufacturing; on the other hand, the public sector was the most dominant and the most influential on the national economic strategy by its massive contribution to GDP approximately 70%, especially the industrial national enterprises such as; SONATRACH, SONACOME, SN METAL, SONELEC, SONEPEC, SONELGAZ…. The national government (the Algerian state) is considered the sole owner and entrepreneur at this period. The second period is characterized by a focus on SME's structures and the return to SMEs development, and public policy initiatives to encourage entrepreneurial initiative activity to create new jobs.

2.3.1.2. SME's Statistics and Evolution in Algeria

According to the last count of Algerian Ministry of industry and mines in 31/12/2019; the number of SMEs has clearly exceeded the bar of one million company with a prevalence of very small private sector companies. With more than 108,538 new SMEs registered during the year, the rapid establishment of business start-up reached an annual growth rate of around 9%. This growth in the number of SME's resulted from the industrial strategy implemented by the public authorities, makes it possible to exceed, by 2019, the objectives set out in the Presidential Program.

Table II.2: Global SME's statistics (31/12/2019)

SME's Count in Algeria		**1 193 339**
SME's created in 2019		**57 642**
SME's Suspended or Closed due to different reasons		**20 550**
Private SME's		**103 693**
Public SME's		**243**
Density of SMEs (Number of SMEs For 1000 inhabitants)	All legal status combined/ world countries average (norm)	**28/45**
	Private companies with moral personality	**16/45**
Number of employed persons (SME's) employment.		**2 885 651**
SME's Imports ($ Millions)		**41 934,12**
SME's Exports ($ Millions)		**35 823,54**

Source: my work based on Algerian ministry of industry statistics and article
http://www.mdipi.gov.dz/IMG/pdf/bulletin_PME_36_VFF.pdf (consulted on 23/10/2021)

According to the previous table we can conclude that 10% of the SME's were created on 2019, which is explained by many factors, significantly the improvement of micro-competitiveness factors and the trend among the young people to seize the opportunity offered by some of the government investment agencies such as CNAC, ANSEJ, ANGEM, ANDI…

B.1 SME's Repartition in Algeria (2019)

At the end of 2019, the total number of SMEs was 1,022,621 enterprises between moral and nominal, more than 56% of which are legal persons, including 390 economic Public enterprises (EPE). The rest is composed of people (43.65%), of which about 21% are self-employed and 23% are crafts.

Table II.3: SME's Repartition (31/12/2019)

	Type of SME's	Number of SME's	Percentage %
1	Private SME's		
	Legal Persons	267 671	56,25
	Naturel Persons	52 1829	43,73
	Liberal professions	247 275	20,72
	Artisanal professions	554 274	23,01
	Total	1 714 925	

2	Public SME's		
	Legal Persons	243	0,02
	Total	243	0,02
3	ALL SME's Total	1 193 339	100,00

Source: my work based on Algerian ministry of industry statistics and article
http://www.mdipi.gov.dz/IMG/pdf/bulletin_PME_36_VFF.pdf (consulted on 23/10/2021)

Figure II.1; SME's Repartition (first semester 2019)
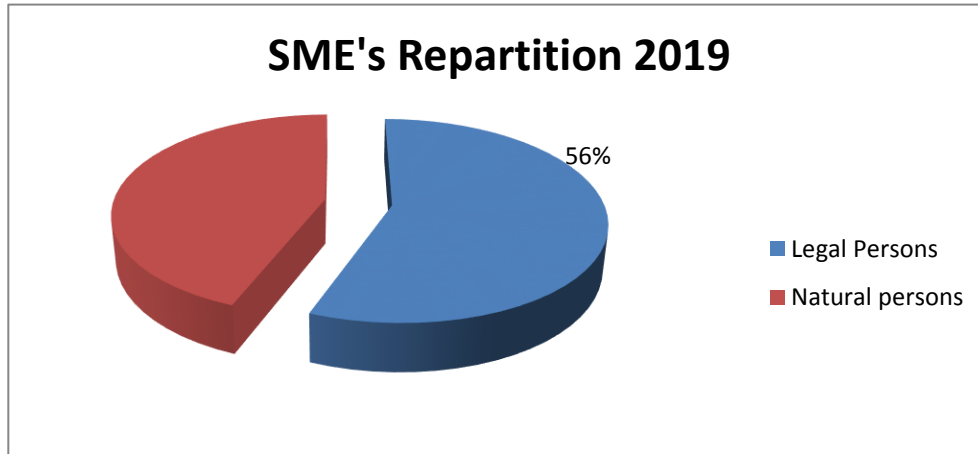
Source: my work based on Algerian ministry of industry statistics and article
http://www.mdipi.gov.dz/IMG/pdf/bulletin_PME_36_VFF.pdf (consulted on 23/10/2021)

We can notice from the previous table and figure that 99% of the SME's are private which is not abnormal taking into account that most bog industries are monopolized by the public and the national companies, it's the responsibility of the private firms to advance the local market by innovating and producing, creating at the same time a healthy investment and competition environment.

2.3.1.2.1 SME's Repartition in Algeria (2019)

The most important statistic and relevant to our research is the repartition by size or by number of employees, it is the reasons why I chose to explore the subject of competitiveness among the micro enterprises.

Table II.4: SME's Repartition by Size (31/12/2019)

Type of enterprise by size	Number of enterprises	%
Micro enterprises	1 157 539	97
Small enterprises	31 027	2,6
Medium enterprises	4 773	0,4
Total	1 193 339	100

Source: my work based on Algerian ministry of industry statistics and article
http://www.mdipi.gov.dz/IMG/pdf/bulletin_PME_36_VFF.pdf (consulted on 23/10/2021)

Figure II.2; SME's Repartition by Size (31/12/2019)
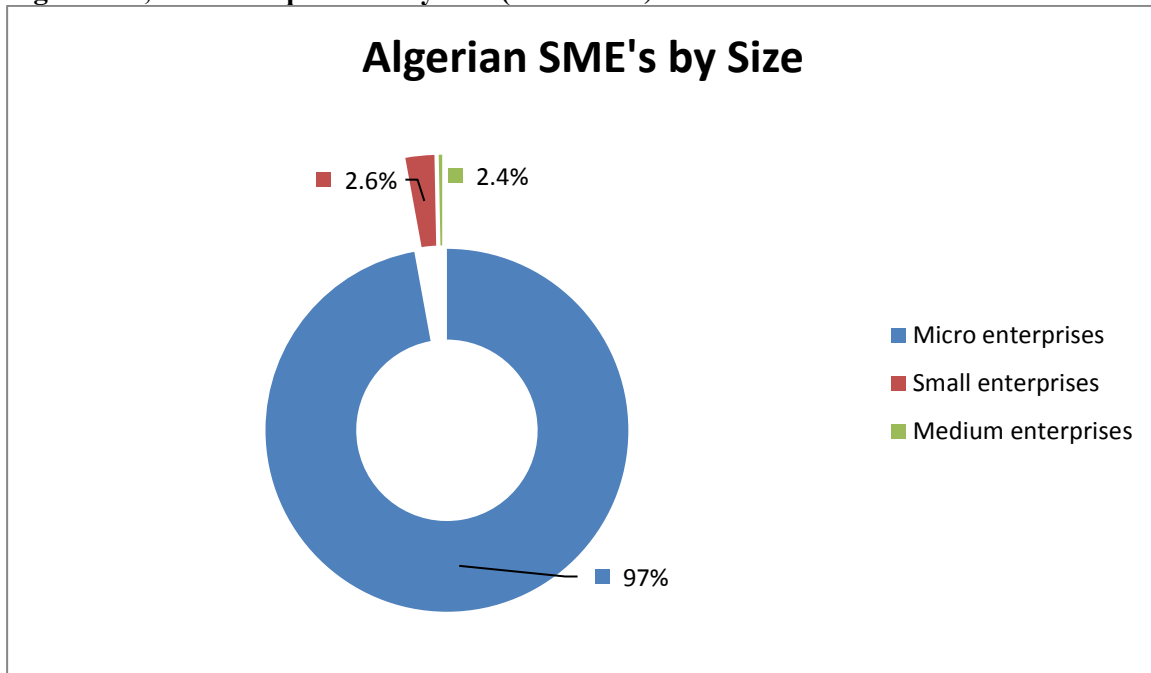
Source: my work based on Algerian ministry of industry statistics and article
http://www.mdipi.gov.dz/IMG/pdf/bulletin_PME_36_VFF.pdf (consulted on 23/10/2021)

According to the previous figure we can clearly state that the micro enterprises are approximately the whole existing types of SME's, for those reasons it has become imperative to diagnostic and analyses their competitive dynamism to figure out why they are still lacking competitiveness after nearly 12 years, no expansion, no merge, no evolution, is it's a problem of lack of ambition from the small managers or it's an environmental problem that needs to be pinned out.

2.3.1.2.2 SME's distribution in Algeria by type of activity (2019)

The distribution by type has many useful purposes; for instance; it is imperative for a new investor in Algerian market to know which types of activities are less competitive or more, and it is considered one of the entry barriers, even in a local market those statistics ca determine the future of the market and the product using the BCG matrix, and some of those statistics can be applied to SWOT analysis. To analyze the distribution, we will separate public enterprises from private enterprises to show what sectors the Algerian government has a monopolistic state.

2.3.1.2.3 Public SME's distribution in Algeria by type of activity (2019)

Public SMEs represent a small part of the overall SME population. Their number is 1 243 SMEs in 2019 against 390 in the (2016), a significant decline of 37%.

Table II.5: Public SME's distribution in Algeria by type of activity (31/12/2019)

Secteurs d'Activité	*PME privées* (Source : CNAS)	*PME publiques* (Source : ECOFIE)	*TOTAL*	*Part en (%)*
Agriculture	7 387	94	7 481	1,11
Hydrocarbures, Energie, Mines et services liés	3064	2	3066	0,46
BTPH	190 155	15	190 170	28,32
Industries manufacturières	103 621	72	103 693	15,44
Services	367 040	60	367 100	54,67
Total Général	**671 267**	**243**	**671 510**	**100,00**

Source: my work based on Algerian ministry of industry statistics and article
http://www.mdipi.gov.dz/IMG/pdf/bulletin_PME_36_VFF.pdf (consulted on 23/10/2021)

Figure II.3; Public SME's employees' distribution in Algeria by type of activity (31/12/2019)
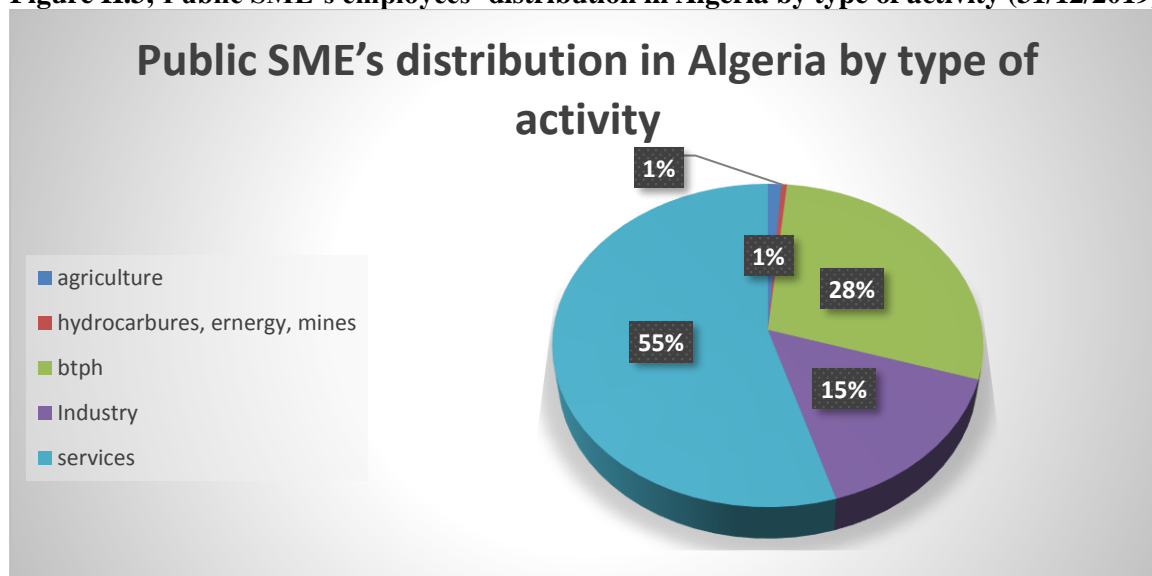
Source: my work based on Algerian ministry of industry statistics and article
http://www.mdipi.gov.dz/IMG/pdf/bulletin_PME_36_VFF.pdf (consulted on 23/10/2021)

Public SMEs operate in all sectors of the national economy, Mainly in Services (55% of SME/ Microenterprises), Industry (15%) and Services (55%). Public building SMEs provide more than 28% of the SME's workforce of the overall employees in this type of enterprises.

2.3.1.2.4 Private SME's distribution in Algeria by type of activity (2016)
The total number of private SMEs at the end of 2016 was 1 022 231. Private SMEs and micro enterprises are mostly active on services (especially transport), handicrafts (such as artisanal manufacturing) and BTPH (building in particular).

Table II.6: Private SME's distribution in Algeria by type of activity (31/12/2019)

	Secteurs d'Activité	*Nombre*	*Part en (%)*
I	Agriculture	7387	0,62
II	Hydrocarbures, Energie, Mines et services liés	3064	0,26
III	BTPH	190155	15,94
IV	Industries manufacturières	103621	8,69
V	Services y compris les professions libérales	614315	51,49
VI	Artisanat	274554	23,01
	Total Général	1 193 096	100,00

Source: my work based on Algerian ministry of industry statistics and article
http://www.mdipi.gov.dz/IMG/pdf/bulletin_PME_36_VFF.pdf (consulted on 23/10/2021)

Figure II.4; Private SME's distribution in Algeria by type of activity (31/12/2019)
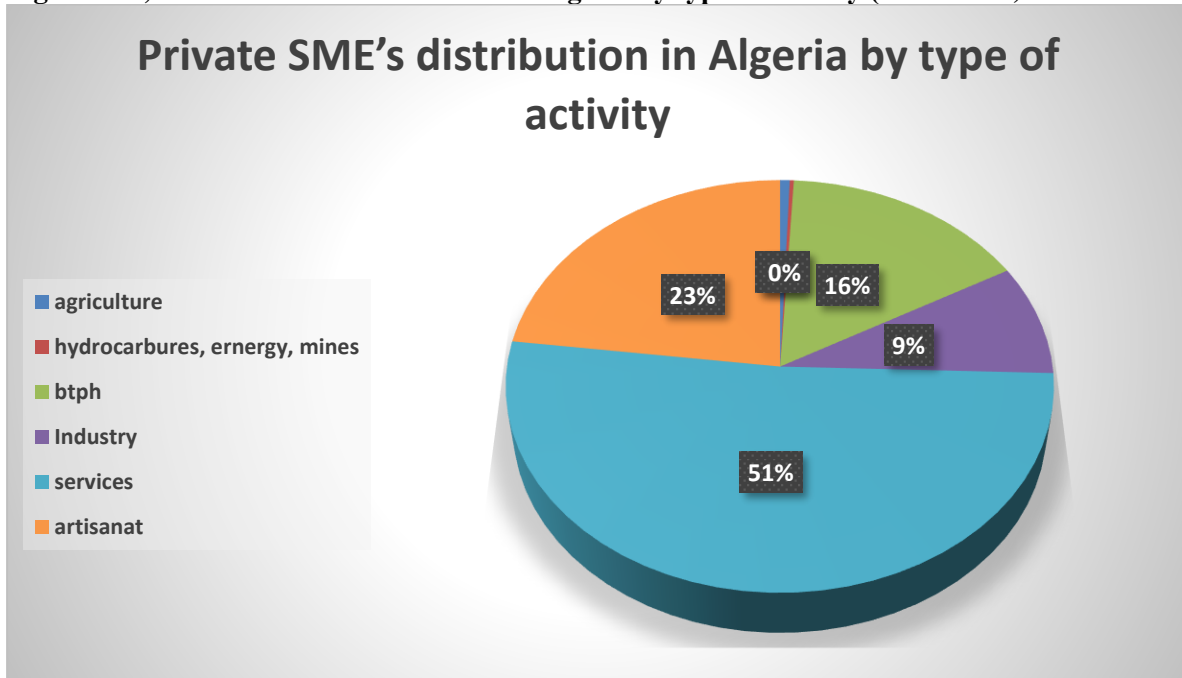
Source: my work based on Algerian ministry of industry statistics and article
http://www.mdipi.gov.dz/IMG/pdf/bulletin_PME_36_VFF.pdf (consulted on 23/10/2021)

From the previous table and figure we can conclude that the sector of services and liberal professions is occupy most of the national market and economic distribution, in the nowadays Algerian economic situation; it is perfectly normal that this sector prevail, the liberal professions such as lawyers and doctors (the majority are shop owners and retailers and traders) …. Are a social need and it is required by any evolved society to provide those services according the number of population and the density of demography?

Overall, the evolution of the SME number between 2015 and 2016 is 9.42% in all legal sectors combined, representing a total net increase of 88 052 SMEs.

The act of investing is above all a choice and a decision to undertake, often Influenced by environmental factors, related to family life and the entrepreneur's professional background, such as the various aids he / she receives, whether financially, or physically or psychologically. those motivations, its professional itinerary and its social origins, it will affect his entrepreneurship, his product making and the way of doing business, this is significantly apparent by analyzing the type and the way of handling the day to day business in each region in Algeria.

All the previous factor in addition to the national economic and investment environment will contribute the creation and the development of the personality and the spirit needed to handle the business challenges contractor's business. That is why it is widely believed that a foreign investor will never be as productive as a local one due to the difficulty that one faces in order to overcome the sociocultural challenges.

Statistics showed that Algerian entrepreneurs are generally male, mature between 30 years and 50 years, in most cases, they are both owners and managers of their companies. Their level of study is high for the majority despite the fact that there are many ones that they only reached a secondary level. They have acquired sufficient experience and managerial knowledge in the same sector where they created their businesses. This dynamism of the private sector is due for the major part to the availability of capital to invest mainly from Personal or a family wealth. Our study shows that the family and personal creativity are the origin of the basic idea behind the project. Moreover, the fact of having in the family model entrepreneurs (parents, brothers) is a determining factor in the commitment to business.

The Algerian investment climate is widely described by many world agencies and foreign business men as lucrative and challenging at the same time, most of the macro economic factors shows a stable prosperity with some difficulties lately due to the world oil prices which is considered by many economies as an economic crises and also affected by the unstable regional political climate due to the Arabic Spring (*Al rabii al arabi*).

Regarding the national economic growth; it has been primarily driven by oil and natural gas with other product derived from the previous two, the oil and gas contributing with 96% of exports and accounting for 40-45% of GDP and 60% of budget revenues. The drop in oil prices has affected significantly the Algerian main revenue stream, however, he has also spurred the Algerian government (GoA: Government of Algeria), to attempt to lower the country's sizable import bill through a policy of diversification that involves more investment both local and foreign one, it is an initiation to boost the private sector participation in the economic process. This change in economic prices forced the GoA to announce a new public spending initiative called *"the 2015-2019 USD 262 billion investment plan",* it is initially a plan that target non-hydrocarbon sector investments, attracting greater foreign direct investment, and lessening the high unemployment rate of Algeria's younger generation.

2.3.2. World Reports on Algerian Business Climate

In order to explore the business climate in Algeria we have to analyses the international reports as they give an objective opinion about the national climate from the point of view of the international business community and foreign enterprises. Reviewing the different international reports, I have noticed that the most credible ones and the most popular in that area are the "doing business report" and the "competitiveness report", which most economists agree with their method of evaluation, and according to most countries represented in the competitiveness forum, the raking in that report can be seen and observed in the real business

word, no objections were raised in that report regarding the evaluation method or the results and the findings.

2.3.2.1. Algerian Business Climate According to 2017 Doing Business Report

This report is the work of the International Bank for Reconstruction and Development / The World Bank, with the help of other external parties, Doing Business 2017 is the 14th in a series of annual reports investigating the regulations that enhance business activity and those that constrain it. Doing Business presents quantitative indicators on business regulation and the protection of property rights that can be compared across 190 economies, measures aspects of regulation affecting 11 areas of the life of a business. Ten of these areas are included in this year's ranking on the ease of doing business: starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts, and resolving insolvency. Doing Business also measures features of labor market regulation, which is not included in the ranking. Data in Doing Business 2017 are current as of June 1, 2016. The indicators are used to analyze economic outcomes and identify what reforms of business regulation have worked, where and why.

2.3.2.1.1 Summary on the Algerian Case in the Doing Business Report

The reports mentioned the Algerian business climate from many aspects we will summarize them in a few points:

Starting a business; Algeria made starting a business easier by eliminating the minimum capital requirement for business incorporation.
Dealing with construction permits; Algeria made dealing with construction permits faster by reducing the time to obtain a construction permit.
Getting electricity; Algeria made getting electricity more transparent by publishing electricity tariffs on the websites of the utility and the energy regulator.
Paying taxes; Algeria made paying taxes less costly by decreasing the tax on professional activities rate. The introduction of advanced accounting systems also made paying taxes easier.

The above point represents a comparison between the Algerian situation in the 2016 report and the current one, we can notice that some improvement has been made to adjust the national economic climate to ease the adaptation of foreign companies and the facilities the investment process for the local investors as well.

2.3.2.1.2 Algerian Ranking in the Doing Business Report

The methodology used to evaluate each country in the report consider the most critical aspect in investment process from the starting requirement; either financial or technical need like electricity and others, to the final stage were the established business can process in the local market, the next table will illustrate the raking and the score of Algerian in each aspect chosen by the report makers:

Table II.7: Algerian Rank and Scores in the 2017 Doing Business Report

ALGERIA	
Ease of doing business rank (1–190)	**156**
✔ **Starting a business** (rank)	142
DTF score for starting a business (0–100)	77.54
Procedures (number)	12
Time (days)	20
Cost (% of income per capita)	11.1
Minimum capital (% of income per capita)	0.0
✔ **Dealing with construction permits** (rank)	77
DTF score for dealing with construction permits (0–100)	71.02
Procedures (number)	17
Time (days)	130
Cost (% of warehouse value)	0.9
Building quality control index (0–15)	10.0
✔ **Getting electricity** (rank)	118
DTF score for getting electricity (0–100)	60.58
Procedures (number)	5
Time (days)	180
Cost (% of income per capita)	1,330.4
Reliability of supply and transparency of tariffs index (0–8)	5
Registering property (rank)	162
DTF score for registering property (0–100)	43.83
Procedures (number)	10
Time (days)	55
Cost (% of property value)	7.1
Quality of land administration index (0–30)	7.0

Source: World Bank Group, "doing business 2017 report", 14th edition, 2016, P.189

According the previous table, Algerian is ranked 156th out of 190 countries, this ranking is good or bad, the general answer is that ranking is reflecting a low economic and investment climate performance, however, the question cannot be easy answer as we have to take many other factors to consideration, what we can comment on, is that the improvement we have perceived by comparing between the previous year report and the current one, due to the increase in local investment, some of the procedures were forced to improve and update to meet the local requirement, the local investors have made a pressure on the Algerian government to improve certain practices and reduce the time to treat the investor files by the government investment related agencies.

The negative aspects according to that table are; 180 days to get electricity with 5 procedures, also it is costly, and the transparency is not significantly high (5 out of 8), construction permits takes 130 day to deliver and it has to pass by 17 procedure, starting a business takes 20 days, and it has to pass by 12 procedures, we are far behind in registering property (162th /190), 118th in electricity, and the most important aspect is starting business were the Algerian case is ranked 142th out of 190 with a score of 77.54.

2.3.2.2. Algerian Business Climate According to The World Competitiveness Report 2017

The Global Competitiveness Report assesses the competitiveness landscape of 140 economies, analyzing the key drivers of their productivity and what factors increase their prosperity, for many managers, economists and world leaders; the report remains the most comprehensive assessment tool of national competitiveness on the world since the classic theory of Michael porter in 1990.

In the following, subject we will present the last statistics regarding the Algerian economic performance between 2016 and 2017; where we can give an objective opinion about the national business climate, and what are the most influential drivers in that economy along with the inhibitors and obstacles that characterize this climate.

B.1 Overall performance according to the WCR 2017

According to the report, Algeria's rank is 87 out of 138, which is the same rank in 2016, with population of 39.9 million and GDP of 172.3 US billion dollars. The most influential factors on Algerian citizen daily life is GDP per capita = 4318.1 US Dollar, also the reports has mentioned that the Algerian GDP represent 0.51% of the world GDP.

The following figure will present the most crucial statistics that characterize this economy according to the report:

Figure II.5; Algerian Overall Performance (WCR 2017)

Edition	2012-13	2013-14	2014-15	2015-16	2016-17
Rank	110 / 144	100 / 148	79 / 144	87 / 140	87 / 138
Score	3.7	3.8	4.1	4.0	4.0
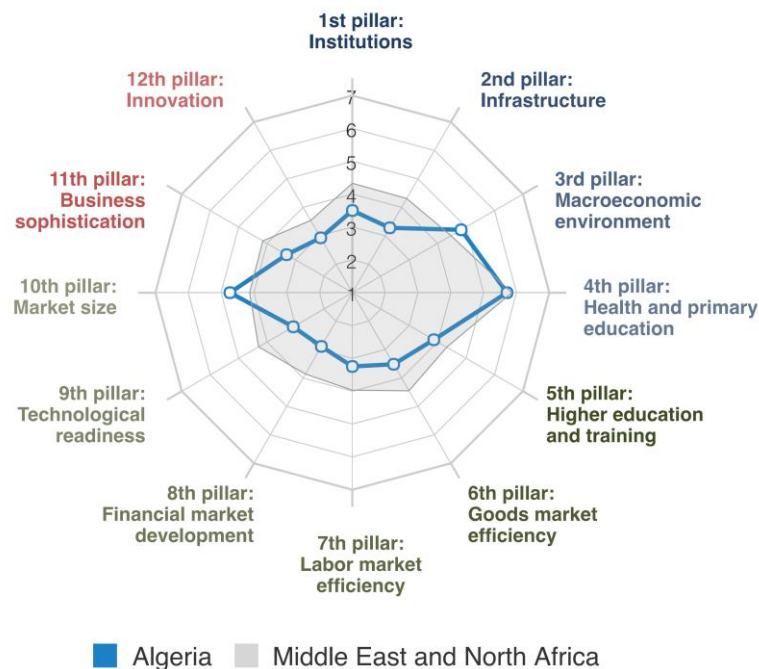
Source: Klaus Schwab, « The Global Competitiveness Report 2016–2017 », World Economic Forum, 2017, P.96

According to the previous figure, the economic competitiveness of Algeria has been improving since 2012 from 110th to 87th , due to many reforms, in both economic and public sectors, the Algerian performance is not far behind the middle east and north African nations, with few exceptions such as; technological readiness, financial market development, labor market efficiency, and goods market efficiency, however in the market size pillar the report underline that Algerian economy outperformances the neighboring nations and the middle east ones with a score of 5 comparing to score of 4 in middle east performance. The institutions and the infrastructures are also one of the negative points that made the Algerian economy far behind some nations like morocco or Qatar. We have to note that improvement in the ranking does not necessarily mean an actual improvement as some countries have been underperforming which made them fall behind.

B.2 Detailed Competitive performance according to the WCR 2017
In this topic, we will preset each pillar by a detailed index which illustrates the source of the score in each pillar, where did it perform well and where did it fall back.

Table II.8: Details of the 1st pillar: Institutions

	Rank / 138	Value	Trend
1st pillar: Institutions	99	3.5	
1.01 Property rights	117	3.6	
1.02 Intellectual property protection	108	3.4	
1.03 Diversion of public funds	81	3.3	
1.04 Public trust in politicians	83	2.8	
1.05 Irregular payments and bribes	101	3.3	
1.06 Judicial independence	94	3.4	
1.07 Favoritism in decisions of government officials	70	3.0	
1.08 Wastefulness of government spending	75	3.1	
1.09 Burden of government regulation	86	3.2	
1.10 Efficiency of legal framework in settling disputes	67	3.6	
1.11 Efficiency of legal framework in challenging regs	75	3.4	
1.12 Transparency of government policymaking	127	3.2	
1.13 Business costs of terrorism	102	4.5	
1.14 Business costs of crime and violence	71	4.6	
1.15 Organized crime	80	4.6	
1.16 Reliability of police services	60	4.7	
1.17 Ethical behavior of firms	107	3.4	
1.18 Strength of auditing and reporting standards	135	3.1	
1.19 Efficacy of corporate boards	136	3.4	
1.20 Protection of minority shareholders' interests	100	3.7	
1.21 Strength of investor protection 0-10 (best)	133	3.3	

Source: Klaus Schwab, « The Global Competitiveness Report 2016–2017 », World Economic Forum, 2017, P.97

In the first pillar; institutions, that many problems appears in the previous table; Algeria has scored 3.0 in favoritism in decisions of government officials, which is the lowest score in that pillar, also has ranked 136th is efficacy of the corporate boards, which is the lowest raking in the index of the first pillar, alongside with strength of auditing and reporting standards and strength of investor protection.

Table II.9: Details of the 2nd pillar: Infrastructure

2nd pillar: Infrastructure	100	3.3
2.01 Quality of overall infrastructure	101	3.3
2.02 Quality of roads	96	3.2
2.03 Quality of railroad infrastructure	57	3.0
2.04 Quality of port infrastructure	105	3.2
2.05 Quality of air transport infrastructure	117	3.2
2.06 Available airline seat kilometers millions/week	64	233.2
2.07 Quality of electricity supply	92	4.0
2.08 Mobile-cellular telephone subscriptions /100 pop.	77	113.0
2.09 Fixed-telephone lines /100 pop.	89	8.0

Source: Klaus Schwab, « The Global Competitiveness Report 2016–2017 », World Economic Forum, 2017, P.97

In the second pillar "infrastructure", Algeria has scored 100th, with the lowest score of 3.0 in quality of railroad infrastructure, and has the lowest raking in the quality of overall, port infrastructure and air transport infrastructure.

Table II.10: Details of the 3nd pillar: Microenvironment

3rd pillar: Macroeconomic environment	63	4.8
3.01 Government budget balance % GDP	135	-15.3
3.02 Gross national savings % GDP	10	34.6
3.03 Inflation annual % change	99	4.8
3.04 Government debt % GDP	4	8.7
3.05 Country credit rating 0-100 (best)	70	-

Source: Klaus Schwab, « The Global Competitiveness Report 2016–2017 », World Economic Forum, 2017, P.97

In the microenvironment; Algeria has scored 63 which is worse than the past years, the negative points in that pillar are; government budget balance (ranked 135th) and inflation with a rank of 99. However on the good side, Algeria has ranked 4th in the government debt and 10th in gross national savings.

Table II.11: Details of the 4th pillar: Health and Primary Education

4th pillar: Health and primary education	73	5.7
4.01 Malaria incidence cases/100,000 pop.	11	0.1
4.02 Business impact of malaria	45	4.5
4.03 Tuberculosis incidence cases/100,000 pop.	86	78.0
4.04 Business impact of tuberculosis	125	4.0
4.05 HIV prevalence % adult pop.	1	0.1
4.06 Business impact of HIV/AIDS	113	4.3
4.07 Infant mortality deaths/1,000 live births	93	21.9
4.08 Life expectancy years	65	74.8
4.09 Quality of primary education	102	3.3
4.10 Primary education enrollment rate net %	40	97.3

Source: Klaus Schwab, « The Global Competitiveness Report 2016–2017 », World Economic Forum, 2017, P.97

on the fifth pillar; health and primary education, Algeria has scored 73 which is significantly acceptable comparing to other developing countries, with a bad ranking in business impact of tuberculosis (125th).

Table II.12: Details of the 5th pillar: Higher Education and Training

🎓 5th pillar: Higher education and training	96	3.9
5.01 Secondary education enrollment rate gross %	46	99.9
5.02 Tertiary education enrollment rate gross %	78	34.6
5.03 Quality of the education system	85	3.4
5.04 Quality of math and science education	99	3.5
5.05 Quality of management schools	127	3.3
5.06 Internet access in schools	124	3.1
5.07 Local availability of specialized training services	120	3.6
5.08 Extent of staff training	131	3.1

Source: Klaus Schwab, « The Global Competitiveness Report 2016–2017 », World Economic Forum, 2017, P.97

In the higher education and training Algeria has ranked 96th, with a bad raking in extent of staff training 131th, and quality of management schools 127th. And the lowest score is in the internet access in schools 3.1.

Table II.13: Details of the 6th pillar: Goods Market Efficiency

📦 6th pillar: Goods market efficiency	133	3.5
6.01 Intensity of local competition	136	3.8
6.02 Extent of market dominance	87	3.4
6.03 Effectiveness of anti-monopoly policy	113	3.1
6.04 Effect of taxation on incentives to invest	92	3.4
6.05 Total tax rate % profits	135	72.7
6.06 No. of procedures to start a business	126	12
6.07 Time to start a business days	103	20.0
6.08 Agricultural policy costs	112	3.2
6.09 Prevalence of non-tariff barriers	125	3.6
6.10 Trade tariffs % duty	127	13.8
6.11 Prevalence of foreign ownership	132	3.1
6.12 Business impact of rules on FDI	135	3.0
6.13 Burden of customs procedures	114	3.4
6.14 Imports % GDP	85	36.0
6.15 Degree of customer orientation	130	3.7
6.16 Buyer sophistication	90	3.1

Source: Klaus Schwab, « The Global Competitiveness Report 2016–2017 », World Economic Forum, 2017, P.97

Algeria has ranked 133 in Good market efficiency with the lowest score in business impact of rules on FDI (3.0) and a bad ranking in total tax rates, also the ranking has decreased drastically in "time to start a business" compared to the past years.

Table II.14: Details of the 7th pillar: Labor Market Efficiency

🔧 7th pillar: Labor market efficiency	132	3.2
7.01 Cooperation in labor-employer relations	115	3.8
7.02 Flexibility of wage determination	113	4.3
7.03 Hiring and firing practices	111	3.3
7.04 Redundancy costs weeks of salary	74	17.3
7.05 Effect of taxation on incentives to work	89	3.7
7.06 Pay and productivity	122	3.3
7.07 Reliance on professional management	135	3.0
7.08 Country capacity to retain talent	116	2.7
7.09 Country capacity to attract talent	125	2.2
7.10 Female participation in the labor force ratio to men	136	0.24

Source: Klaus Schwab, « The Global Competitiveness Report 2016–2017 », World Economic Forum, 2017, P.97

Table II.15: Details of the 8th pillar: Financial Market Development

8th pillar: Financial market development	132	2.9
8.01 Financial services meeting business needs	131	3.1
8.02 Affordability of financial services	95	3.5
8.03 Financing through local equity market	124	2.5
8.04 Ease of access to loans	122	2.9
8.05 Venture capital availability	85	2.6
8.06 Soundness of banks	123	3.6
8.07 Regulation of securities exchanges	129	3.0
8.08 Legal rights index 0-10 (best)	108	2

Source: Klaus Schwab, « The Global Competitiveness Report 2016–2017 », World Economic Forum, 2017, P.97

In financial market development, Algeria has ranked 132nd, which is considered to be an improvement comparing to the previous years, however, it scored 129 in regulation of securities exchanges and the lowest score is in the legal rights index (2.0)

Table II.16: Details of the 9th pillar: Technological Readiness

9th pillar: Technological readiness	108	3.1
9.01 Availability of latest technologies	125	3.7
9.02 Firm-level technology absorption	128	3.6
9.03 FDI and technology transfer	121	3.6
9.04 Internet users % pop.	95	38.2
9.05 Fixed-broadband Internet subscriptions /100 pop.	84	5.6
9.06 Internet bandwidth kb/s/user	80	30.1
9.07 Mobile-broadband subscriptions /100 pop.	85	40.1

Source: Klaus Schwab, « The Global Competitiveness Report 2016–2017 », World Economic Forum, 2017, P.97

In technological readiness Algeria is still behind the Middle East and north African countries, the lowest raking was the firm level technology absorption, which made the Algerian business management far behind the majority of developing countries.

Table II.17: Details of the 10th pillar: Market Size

10th pillar: Market size	36	4.7
10.01 Domestic market size index	33	4.6
10.02 Foreign market size index	43	5.1
10.03 GDP (PPP) PPP $ billions	33	578.7
10.04 Exports % GDP	102	24.0

Source: Klaus Schwab, « The Global Competitiveness Report 2016–2017 », World Economic Forum, 2017, P.97

The Algerian market size is a positive point comparing to developing countries and North African and Middle East ones, she has scored 33 in the domestic market index, and GDP per capita, which made this point one of the competitive advantage of the Algerian nation and a significant improvement in the national business climate.

Table II.18: Details of the 11th pillar: Business Sophistication

11th pillar: Business sophistication	121	3.3	
11.01 Local supplier quantity	108	4.0	
11.02 Local supplier quality	130	3.4	
11.03 State of cluster development	115	3.1	
11.04 Nature of competitive advantage	93	3.1	
11.05 Value chain breadth	109	3.4	
11.06 Control of international distribution	112	3.0	
11.07 Production process sophistication	108	3.2	
11.08 Extent of marketing	125	3.7	
11.09 Willingness to delegate authority	124	3.1	

Source: Klaus Schwab, « The Global Competitiveness Report 2016–2017 », World Economic Forum, 2017, P.97

The business sophistication has ranked Algerian economy in the 121st place, which is an improvement comparing to the data available in the past reports. However it has a bad ranking local quality supplies quality and acceptable raking in the nature of competitive advantage.

Table II.19: Details of the 12th pillar: Innovation

12th pillar: Innovation	112	2.9	
12.01 Capacity for innovation	112	3.7	
12.02 Quality of scientific research institutions	99	3.4	
12.03 Company spending on R&D	113	2.8	
12.04 University-industry collaboration in R&D	120	2.7	
12.05 Gov't procurement of advanced tech. products	105	2.9	
12.06 Availability of scientists and engineers	81	3.8	
12.07 PCT patent applications applications/million pop.	94	0.2	

Source: Klaus Schwab, « The Global Competitiveness Report 2016–2017 », World Economic Forum, 2017, P.97

In the aspect of innovation; Algeria has ranked 112, the bad ranking is the university industry collaboration in R&D (120th) and it has an acceptable raking in availability of scientist and engineers,, however on the overall innovation performance, Algeria has made very significant improvement comparing to the past years.

By analyzing the two reports , we can conclude that they have made an approximative evaluation based on the 2017 data, the important aspect in those reports is the improvement that Algeria has made over the past years however this advantage can be nullified if compared it to the improvement that other countries made, the improvement is a good aspect that characterize the Algerian business climate but it is significantly slow comparing to other developing countries or even to the north African and the middle east ones.

The second point that one can conclude analyzing those reports, is that all negative points in that climate came from two aspects; the first is a managerial problem as we can notice in health pillar, primary education, higher education and training and business sophistication, and the second aspect is overall economic diversification and evolution, as we can notice comparing the Algerian data to other countries and by analyzing the outcome of the technological readiness and the pillar of innovation.

On the good side, the second report has made the domestic market size as one of the best in the world, which is considered to be a competitive advantage if it is correctly and properly used to enhance the overall economic performance and the efficiency of national business climate.

2.3.3. The Investment Climate for Foreign Companies

most of my literature review findings were negatively describing the investment climate in Algeria, in was described as discouraging and lacking the openness necessary for doing business, while those reports are in majority conducted by U.S economists and US departments, this raises the question of the credibility of those reports, due to the same reason described by most authors which is the lack of information and the difficulty of collecting those data from a formal sources. In this matter my research regarding that point will hamper my quest to describe the national climate due to the difficulty to obtain objective informations in that matter. This is why I chose to explore the subject from different point of views extracted from both local and foreign reports.

2.3.3.1. Openness To, and Restrictions Upon, Foreign Investment

The Algerian investment climate regarding openness is challenging. Companies must overcome language barriers, distance, customs challenges, an entrenched bureaucracy, difficulties in monetary transfers, currency conversion, repatriating dividends, and price competition from Chinese, Turkish, and European businesses. International firms that operate here sometimes complain that the GoA lacks an economic vision, and that laws and regulations are constantly shifting and applied unevenly, raising the perception of commercial risk for foreign investors. Business contracts are likewise subject to changing interpretation and revision, which has proved challenging to U.S. and international firms. Other drawbacks include the 49/51 investment law (which requires majority Algerian ownership of all new businesses), inadequate IPR enforcement, and limited regional trade. The lack of a regional market also impacts negatively Algeria, because on its own, Algeria's market may not be attractive to firms that can locate elsewhere to create a regional distribution hub

2.3.3.1.1 Attitude toward Foreign Direct Investment

Algerian attitude toward FDI (Foreign Direct Investment) is described by U.S. Department of State as following: *"Algeria is the epitome of a high risk, high reward economy. While the GoA is enthusiastic towards FDI, a difficult business climate, an inconsistent regulatory environment, and a government that seems torn generationally between protecting the status quo and liberalizing the economy hampers what could be potentially be a flood of foreign investment in this emerging economy. There are business opportunities in nearly every sector, including but not limited to energy, power, water, health care, telecommunications, transportation, recycling, and agribusiness. The recent drop in oil prices has highlighted Algeria's over-dependence on hydrocarbons and increased calls to open and diversify the economy. The GoA is completely aware that its current economic model cannot be sustained but has been slow to make the necessary economic reforms. Instead, the GoA's short-term reaction has been to restrict imports in an attempt to lower the import bill and encourage domestic production. The arbitrary and haphazard way in which the GoA is changing business regulations to discourage imports has only added to the uncertainty of the market. The 49/51 investment law limits all foreign ventures to a minority stake in all new investments in any sector of the economy"[1].*

From the previous statement we can conclude that Algerian investment climate bear a lot of risks for a sustainable business model, especially for foreign companies, and this closed policy is due to national economy protection motives, and in the same time it struggle to increase the revenue stream through liberating the foreign investment. Also, it has mentioned the over-dependence on hydrocarbons, which encourage the GoA to seize the opportunities presented in the local market such as power, water, health care, telecommunications,

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[1] https://2009-2017.state.gov/e/eb/rls/othr/ics/2015/241455.htm (consulted 16/01/2018)

transportation, recycling, and agribusiness sectors. To summarize the main idea; the GoA is struggling between two policies; the first is the obligation to liberate the foreign investment dictated by the present economic difficulty and the diversification strategy. and the second; is protection of the national economy by preserving the local and national companies; which reveals the weakness of the local economic fabric and the inaptitude for the national companies to compete on liberated terms without Government protection, the example of 49/51 investment law is an example used to illustrate this fact.

From national point of view of the *National agency of investment development* (ANDI), the openness and the attitude toward foreign companies is presented in form of law reforms and economic policies that encourage such investment, however, the terms of that investment as may be difficult and discouraging for the foreign companies, they are for objective the benefit of the Algerian economy and people, as may all know the economy in Algerian is oriented toward the citizen prosperity rather than economic wealth. For those reasons the investment as may be closed in the eyes of foreign companies is is strategically placed over the geographic location and in most profitable sectors. In the following statement presented by the ANDI we resume the national investment incentives for foreign investors:[1]

Part from the advantages of the derogatory scheme of area:

1. *for investments implemented in ADRAR, ILLIZI, TAMANRASSET, and TINDOUF*:
- Reduction of 50 % of the Global Income Tax (IRG) for a period of five (05) years;
- Payment of a dinar per square meter from the State fee for a period of 15 Years and 50% reduction beyond this period, for land concessions intended for investment projects.

2. *For investments implemented in the South*:
- Payment of one dinar per square meter of the State owned fee for a period of 10 years and reduction of 50% beyond this period for land concessions for investment projects.
- Payment of one dinar per hectare for a period from 10 to 15 years, and beyond this period, a reduction of 50%, of the State fee on new farms
- A bonus of 4.5% interest rates applicable to bank loans for investment in tourism projects;
- A bonus of 4.5% interest rates applicable to bank loans to actions of modernization of tourist establishments and hotels;

3. *for investments implemented in the high lands:*
- Payment of one dinar per square meter of the State fee for a period of 10 years and reduction of 50% beyond this period for land concessions for investment projects.
- Payment of one dinar per hectare for a period from 10 to 15 years, and beyond this period, a reduction of 50%, of the State fee on new farms

4. *for investments of the general scheme and carried out in the following sectors of activity*:
- Iron and steel, hydraulic binders and Electrical Appliances, industrial chemistry, mechanical and automotive, pharmaceutical, aerospace, shipbuilding and repair, advanced technology, food processing, textiles and clothing, leather and derivatives, leather and related products, wood and furniture industry, in addition to the benefits for the realization period:
Temporary exemption for a period of five (5) years from the tax on corporate profits (IBS) or tax on the total income (IRG) and the tax on the turnover.

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[1] http://www.andi.dz/index.php/ar/statistique/bilan-du-commerce-exterieur (consulted in 10/08/2015)

The investment laws were oriented toward the south and the less developed sectors that provide a strategic benefit for the economy. The openness in some sectors and the closeness in others may be a difficult choice and anti-liberation from an international point of view. The previous statements do not justify the current strategy, since, the factors of competitiveness are binding for every economy to succeed both locally and internationally.

2.3.3.1.2 Other Investment Policy Reviews

To summarize that point, it is sufficient to say that the U.S. Department of State has mentioned that the last three years has been idle for business, with no significant investment policy review, except an agreement with the World Bank for technical assistance designed to improve Algeria's most recent "Doing Business" global survey ranking of 154 out of 189

2.3.3.1.3 Laws/Regulations of Foreign Direct Investment

In that matter, the report discussion are focused on the 59/51 law, which has been a major obstacle for the foreign companies, on the other hand it mentions the national policy toward the more strategic and the southern area; "*Investment incentives, such as tax breaks on corporate income and Value Added Tax (VAT), with longer periods of tax abatement provided for investment in southern regions of the country as opposed to the more heavily populated coastal areas, are available in the general economy and are not tied to specific sectors, although the GoA has been aggressive in recruiting businesses in the energy, housing construction, health care, and agricultural sectors. Incentives are listed by the National Agency for Investment Development (ANDI) website, as well as on the websites of economically oriented ministries*". That element was explained in the preceding discussion.

2.3.3.1.4 Industrial Promotion

In that point the report discusses the ANDI restructuring since February 2015, to provide the necessary information and to create a one shop for all the necessary info and documents for those who seeks to start a new business.

2.3.3.1.5 Limits on Foreign Control

The report also discuss the 49/51 law with some elaboration, according to it, this law can be manipulated and work around it by using multiple local partners in the same venture, effectively reducing ownership of each individual local partner to enable the foreign partner to own the majority share, however, There are allegations that Algerian partner companies can be unreliable; specifically, that Algerian partners sometimes refuse to invest the required funds in the company's business, require non-contract funds to get projects, and send unqualified workers to job sites. Manufacturers are also concerned about the potential loss of intellectual property, as foreign companies don't want to give up control of their designs and patents. In the same point, the local authorities has assured the foreign companies that despite the impediment posed by the law, it is needed to diversify investment in Algeria's economy, foster private sector growth, create employment for nationals, transfer technology and know-how, and develop local training initiatives. The report argue also that law indirectly prevent the smaller companies such as SME from entering the Algerian market due to the compliance costs that would eliminate acceptable profit margins, also they cannot provide a significant job for the local which is considered non beneficial for the GoA.

2.3.3.1.6 Screening of FDI

The report mentions two points regarding that subject; the first is that no current privatization program is initiated neither , there is any intention to initiate one from the GoA, the second point, is that the decision making process regarding the foreign investment is still unclear and ambiguous which make it subject to political influence, and they mention as a proof of that a case of US company tries to invest in an American bank in Algeria, where the finance of ministry delegated the screening process to the central bank of Algerian and the stock exchange, and they both made they approval within days, however, the project is stil idle for 12 months after that and delayed for no reason by the ministry of finance, and the answer behind that delay is more ambiguous, which suggests another factors than the regular and the formal decision making process that influence such decisions, in other hand creating a CNI: the National Investment Council, was a positive decision toward liberalizing and facilitating the investment process, rather than national wide screening which was applied before that.

2.3.3.1.7 Competition and Investment trends

The National Competition Council (Conseil National de la Concurrence) is both the regulator and the the responsible for the competition in the national market, he reviews both domestic and foreign competition related concerns. It was created in late 2013 under the ministry of commerce. New financial measures have also been introduced to attract greater foreign investment and develop the local private sector by building small and medium-sized enterprises. The 2015- 2019, USD 262 billion investment plan focuses on: hospital construction and renovation, with the construction of five new hospitals and the renovation of 15 existing hospitals planned; wastewater management and desalination; and transportation infrastructure, particularly airports and ports. Regarding the energy and power sector, Algeria is moving slowly from its traditional European partners to US and Asia to diversify and stabilize its economic and political stand, Companies that choose to invest in Algeria often report double digit profits and have reported that once the significant barriers to entry are overcome, navigating the day-to-day aspects of the business environment, while still taxing becomes easier.

Other points significantly and negatively influencing the FDI; a continuing increase in consumption and investment spurred and overseen primarily by the public sector. An unpredictable regulatory environment, inconsistent enforcement of laws and policies, a bureaucratic customs process that significantly impedes the efficiency and reliability of the supply chain, and the 49/51 law still create, according to business contacts, significant uncertainty in the market. With the drop in its foreign currency reserves due to falling oil prices, the GoA has also taken on more protectionist policies to limit the outflow of capital, which further diminishes the attractiveness of the Algerian market. The 49/51 law that was established as a safeguard to ensure local private and public sector participation in the economic process was created and applied in 2009, observing and analyzing the FDI overview statistics will demonstrate a significant drop in new created foreign companies after that date; from 2007-2008 the number of foreign companies established in Algeria increased 23.7 percent. In 2010-2011, the number of established foreign companies increased by 3 percent, and in 2013 there was a 19 percent drop in the growth, with 810 foreign companies created as opposed to the 1,008 created in 2012. Looking at FDI net inflows from 2006 to 2009 as reported by the United Nations Conference on Trade and Development (UNCTAD), there was an average annual increase of 14.18 percent. From 2009 to 2013, there has been an average annual drop of 8.38 percent of FDI net inflows. FDI comprises less than one percent of Algeria's GDP.

2.3.3.2. Conversion and Transfer policies

The report mentioned that the difficulties in this process is in the bureaucratic behavior of the intervening parties, they mentioned also that the transfer process have to go through 30

different steps from beginning to end, and that in theory that process will not take more than one month but in reality this very process never takes less than 3 to six months, also another negative point is that the value of the Algerian dinar is not determined by any mechanism, but only and solely controlled by the central bank of Algeria.

2.3.3.3. Intellectual Property Rights;

While Algerian government seeks to acquire new patents and develop the industrial and managerial aspects through learning from the foreign companies, this business relation is not significantly beneficial to the foreign companies as they leak more and more information that is supposed to be protected, also the laws in that area are not up to date and in some cases ambiguous.

The FDI discussion can take more of our subject, there are many aspects in that area mentioned by both national and international reports, we will close this discussion at this point to avoid unnecessary analysis that are not directly related to our research subject.

According to the previous analysis, we have demonstrated that Algerian economy is characterized by a minimum diversified structure; especially since the hydrocarbon sector is the dominant one (The oil sector generates more than 70% of the country's budgetary revenue and approximately 45% of the country's GDP and more than 97% of the country's export. and the employment rate among the youths (approximately 21%) is very high, and as a continuation to the market economy that the Algerian government has implemented its strategy around since 1999, Algeria's economic attention began to turn to the private sector, particularly on SMEs due to their major role in economic development and their ability to provide jobs. Since the opening of the Algerian economy and the progressive adoption of a market economy in the early 1990s, the SME sector has realized a net augmentation in numbers. Statistics from the Algerian Ministry of Industry, SMEs and Investment Promotion agency indicate that the SME sector has ensured its increasingly important role in the national economic structure. By the end of 2013, Algeria's registered small- and medium-size enterprises exceeded 748,000, comprising 99% of the country's total enterprises. (Asma Benzazoua Bouazza & al 2015, p.101)

From this chapter we can see that the evolution of investment climate in Algeria has never been the same for the foreign and the national investors, the local investor can overcame the challenges that he faces each day because he is a new entrepreneur and the risk related to the capital invested is minimum due to the usually low initial capital, however the foreign investor is generally has far more experience and managerial skills to do business which make him compare the turn over the gain of his project in Algeria and a same project in another country, this comparison will not be fruitful for him. Eventually he will conclude the Algerian investment climate is far behind his skills and the opportunity that may find in other business attractive countries with more evolved and sophisticated investment climate.

The second assumption is that the development of the investment climate passed by many government economic policies in which somewhere in the favor of investment liberation and others were against the total liberation of that climate, so one, can conclude that the investment climate sometimes raise and evolve and sometimes will setback also the opportunities for starting business shrink in other periods.

The last point in that chapter present the most significant factor in entrepreneurship theory and its adaptation to the Algerian economic climate, the main drivers for the company creation process are not the same in the European and western managerial theory and in the Algerian real practices, the economic fabric for SME's is still depending in the major part upon

the micro enterprises and the commercial and trade shops, this is why we have to sat the pillars to encourage the evolution of that type of enterprises in order to change this economic fabric and set a competitive environment that inspire the rapid development to a big companies that have the capabilities to compete internationally, and gain a market share in the world market.

CHAPTER

THREE

Chapter 3: Research Methodology

The methodology is provided in this chapter. It is aligned to the research questions and consists of research design, the population and sampling Design, data collection methods, research procedures and data analysis and methods, in each point we will discuss the utility of that tool and the reasons behind that choice.

3.1. Data Collection Framework

In this section we will discuss, how the data was gathered and what are the tools used in the data collection process and what are the main region the sample was chosen from.

3.1.1. The Sample size and sampling criteria

Before conducting a questionnaire, we have to determine the sample size and the sampling criteria, the research population is very large, demographically mixed, and geographically dispersed, it might be difficult to gain access to a representative sample. That why we have to illustrate the sampling criteria that we believe is the most appropriate one for our research.

3.1.1.1. The number of SME's used in the study

In our research we have initially distributed 143 questionnaire and we retrieved 120 valid questionnaires that have been used in the actual statistical analysis. As explained below:

Table III.1: Questionnaire Structure

Total distributed	Missing	valid
143	23	120

Source: my work based on questionnaire data

3.1.1.2. The Sampling Criteria (Stratified sampling)

For many reasons, we have chosen the **Stratified sampling**, Stratified sampling involves dividing the population into subpopulations that may differ in important ways. It allows you draw more precise conclusions by ensuring that every subgroup is properly represented in the sample.

3.1.1.2.1 The representation criteria; according to the last statistical count conducted by the Algerian ministry of industry in April 2020, the total number of SME's in Algeria is 1 193 339[1] (the total statistical population), and if we apply 5% as statistical representation percentage, we have to analyze the data from 59667 enterprise which would be non-practical taking to account data collection difficulties.

3.1.1.2.2 The Study Definition of Subgroups; after analyzing the whole population we found that 97% of the total SME's in Algeria are micro enterprises with less than 10 workers, which would be less competitive due to the lack of competitive maneuvers that a micro enterprise can exploit in its competitive strategy, and therefore less representative for our research purposes.

3.1.1.2.3 The Distribution of Subgroups; we have based our research on four types of enterprises (Agriculture and fishing enterprises, enterprises

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[1] http://www.mdipi.gov.dz/IMG/pdf/bulletin_PME_36_VFF.pdf (last consulted on 28/10/2020)

in Building Materials, Hotel & Catering, and transportation). The choice of those four types was due to two reasons; the first is that these types of market segmentations are characterized by high growth rate in the Algerian market, which means a highly competitive market with a promising large total market share and less entre barriers, that made the market more and more lucrative and attractive for the new comers or startups. The second reason, is that I have chosen subgroups also according to Algerian regions (east, west and center of Algeria), -I had difficulties accessing information about southern enterprises especially subcontracting oil related enterprises-, selecting enterprises by geographic regions requires selecting an activity type which is available in all those regions. The limiting field research conditions were part of the choice of the sample.

3.1.2. Data collection tools

To address the case study aspects of the research topic, the researcher used the survey method to collect data through the questionnaire as a main tool; it was used to collect data on the subject of the study as a principal tool.

The questionnaire is one of the most important tools for gathering information it have the capacity to gather different qualitative and quantitative data that can't be measured by traditional ways, it have been used in this research to answer partial hypotheses. The construction of the form required several stages:

3.1.2.1. the preparation stages
We have developed the questionnaire based on what has been addressed in the theoretical aspect, and depending on some studies related to the subject of the research; after that we formulated a set of questions that we believe reflect more the research hypothesis.

3.1.2.2. Phase of the arbitration:
The questionnaire was judged by a group of specialized professors working in the research unit in Khenchela University, to ensure the appropriateness of the data and the ability of the form to solve the study problem and achieve its objectives.

The observations focused on the following points:

- Rearrange some questions in line with the study hypotheses;
- Rework and simplify some questions;
- The need to separate terms and avoid the use of synonyms.
- All observations have been taken into consideration, and some modifications have been made to the form in the light professors' notes.
- The form was presented to some institutions before being distributed Some simple modifications have been made.
-

3.1.3. Questionnaire Distribution

After we have completed the preparation of the questionnaire, we have addressed the issue of the data distribution, as the study require a significant representation of the statistical population which is in our case the small and medium enterprises, for that reason we have used different methods to distribute the questionnaire;

We have divided the area of distribution by many small geographic sectors in each city, so the individuals who distributed the questionnaire can address a certain sector, as we have initially organized the process of distribution.

3.1.3.1. *For the Khenchela area*; we have distributed the questionnaire on many small and medium enterprises in different economic and business field, and for that purpose we have used the help of some of the Khenchela local citizens, especially students in Khenchela university, and some of the administrative staff that we have found very helpful in our research quest.

3.1.3.2. *In oum el bouaghi area:* we also distributed the questionnaire on a significant number of students in l arbi ben mhidi university, as well as some colleagues from professors and administrative staff in university,

Note: the students and citizens in both Khenchela and oum el bouaghi university were not the responders, they only assist in our research due to the many enterprises we have to address in our research, and those individuals helped us significantly by delivering those questionnaires to many small and medium enterprise directors and managers.

3.1.3.3. *Constantine area:* we have assigned the distribution of the questionnaire in this area to a former colleague of mine who have worked in the agency of ANSEJ in Constantine area, who by himself was able to reach many of the local small and medium enterprises working in different business sectors.

3.1.3.4. Oran area; we have assigned this task to a colleague of mine in the research unit, and we have obtained some of the data from Oran.

3.1.3.5. Internet; I have distributed a number of questionnaires online on a Facebook group concerning small and medium enterprises and former managers of those enterprises.

3.2. The Choice of Variables and Analysis Method

In our case the choice of variables was not by chance, after we conducted a literature review and comparing it with the real Algerian entrepreneurship culture and reality observation we were able to adjust some variables that have a different effect from a highly competitive market like in European nations and USA, after a thorough study of the local market and conducting a preliminary investigation with professors in economy filed and professionals and business men we were able to verify why some variables have no effect in local market whereas they are the most influential factors in the developing countries

market, some of our findings point to the difference in cultural preferences and social structure and buying education ...etc. we will discuss those points in the next sections.

3.2.1. The Choice of Variables

The choice of variables depends on many academic studies and also it has been rectified with some of the field inquiry conducted by the researcher based on the particularities of the Algerian case; in which some new cultural and social elements were introduced to the study based on the research estimation of their importance in the study and their possible influence on the study subject.

Figure III.1: The Structure of Research Variables
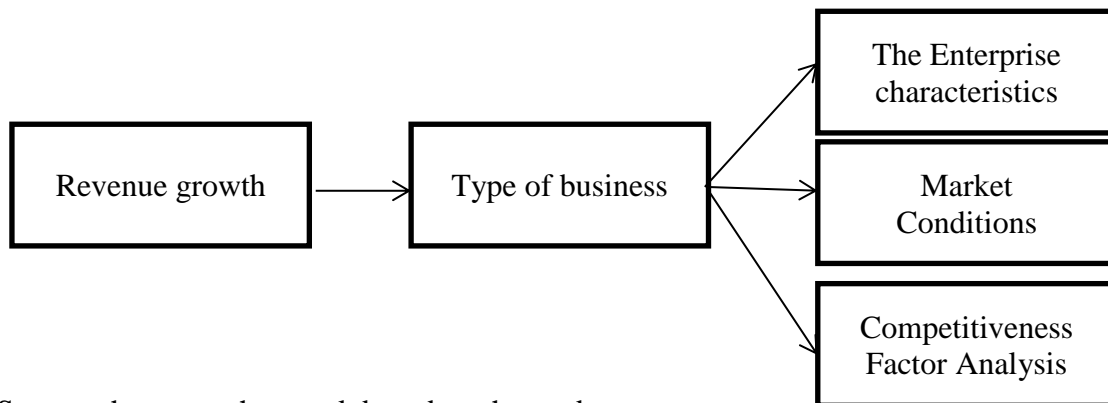
Source: the researcher work based on the study structure

3.2.1.1. Revenue Growth (dependent variable)

Revenue Growth Rate is an indicator of how well a company is able to grow its sales revenue over a given time period. While the revenue is an actual number, the revenue growth rates simply compare the current sales figures (total revenue) with a previous period (typically quarter to quarter or year to year). it provides an indicator that allows easier comparisons between different firms (especially in the same industries or markets) and provides a measure of the extent to which a company is able to grow.

3.2.1.2. Type of Business (median variable)

When we analyzed the data we found that the relation between the revenue growth and the other factors that shape competitiveness differ according to the type of the business, which means that for instance social support and loan rates affect agricultural enterprises in way that differ entirely from the hostelry and restauration business, so we have managed to devise our competitiveness analysis according to the type of business.

3.2.1.3. The Enterprise Characteristics (independent variable)

The enterprise characteristics refers to the variable that determine the enterprise capabilities and specialties such as number of labor force, the location, type of ownership, how old is the business compared to competitors.

3.2.1.3.1 *Number of workers:* **which can indicate the category of the enterprises?**

3.2.1.3.2 *Type of enterprise's ownership:* **which indicate if the entreprise is public one or private?**

3.2.1.3.3 *Enterprise management:* **is it managed by a separate hired manager or the owner of the enterprise is the manager.**

3.2.1.3.4 *Years of business:* **we have defined three categories less than three years, between 3 and 5 years and older than 5 years of business.**

3.2.1.4. Market Condition (dependent variable)

This group refers to the variables that define the competitive environment of the business such as condition of competition, the strength and the concentration of competition, the market entry barriers and other variables that define the market of the enterprise.

3.2.1.4.1 *Competition evaluation***: is it a heavy competitor market or small divided competition, this will help or discourage new entrant to the market and the startups companies in this specific industry.**

3.2.1.4.2 *the effect of competition:* **does this competition helped the enterprise develop certain undeveloped skills; does it make the growth of the enterprise advance faster than in case of no competition? Or if the effect is negative does it cut the enterprise's annual profits does it make the financial situation very hard, does this competition drive the enterprise out of business and market.**

3.2.1.4.3 *the Market share:* **refers to the approximate market share of the enterprise in the absence of correct statistics that can help us determine the market share princely.**

3.2.1.5. Competitiveness Factor Analysis (dependent variable)

This Group of variables determines the competitive performance of the enterprise in light of social, financial and technical variables that determine the competitiveness in the Algerian market. In this section we have multiple variables such as; the effect of financial aid, the effect of banks performance, the effect of family and social environment, how well the enterprise respond to its clients, and supplier, how well the enterprise control its costs, does this company develop new less costing procedure, does it make an annual reassures to develop the quality versus cost products…

3.2.2. The analysis Tools

We have used the questionnaire as a tool to collect data and analyze the frequencies and the possible relation between the different axes of the study, and to build this questionnaire we went through different stages:

3.2.2.1. Preparation phase; the form was developed based on what was theoretically addressed, and based on some studies related to the subject of the study; where the formulation of a set of questions that answer hypotheses search.

We have divided the questionnaire to three axes:

3.2.2.1.1 *Personal information:* in this section we have chosen general question about the enterprise name, type of business, number of workers, public or private enterprise, etc. (appendix 1).

3.2.2.1.2 *the entrepreneurial attitude:* in this section we have selected a set of questions about possible factors that affect the startups of an enterprise from the idea creation process to the actual realization.

3.2.2.1.3 *The competitive advantage in the enterprise:* this refers to the possible competitive advantages that the enterprise uses to get ahead of its direct competition from quality of the product to the cost management so we can evaluate each of them and its use and importance in the enterprise.

3.2.2.1.4 *the competitive advantage in general:* we have evaluated the importance of the factors that a similar enterprise can use to gain a greater market share and serve its selected customers with a high degree of professionalism that guarantee long term relationship based on loyalty.

Table III.2: Questionnaire Structure

Study axes	Questions
Personal information	From Q1 to Q9
Entrepreneurial attitude	From Q10 to Q24
Competitive advantage	From Q1 to Q43

Source; researcher work based on the questionnaire information

We have used Likert scale to evaluate the different aspect of the research since we do not have a reliable official source to provide us with the exact numbers that we need, also we due to the special period that Algeria is going through, many enterprises have refused to even agree to meet with us.

Table III.3: Likert Scale

Measurement scale	Questions
1	Very negative effect
2	negative effect
3	no effect
4	Positive effect
5	Very positive effect

Source; researcher work based on previous knowledge

We have changed the scale on the third axis so instead of positive and negative we have chosen agree to disagree.

3.2.2.2. Arbitration of the questionnaire; The questionnaire was evaluated by a group of professors to ensure the appropriateness of the data and the ability of the questionnaire to solve the problem of the study and achieve its objectives. The observations made by the evaluators focused on the following points:

- Rearrangement of some questions in line with the study hypotheses;
- Rephrase and simplify some questions;
- The need to separate terms and avoid the use of synonyms.

All observations have been taken into consideration and some modifications to the form have been made in the light Teachers' notes.

The questionnaire was also presented to some institutions prior to final distribution for feedback on the simplicity and the understandability of the questionnaire and based on that modifications have been made.

3.2.2.3. Study Sample Characteristics:

In our collect data phase we have chosen a a random enterprise pool for the purpose of the study, we have collected the data between in approximately 4 months before November due to many circumstances that we have faced, the enterprises where distributed across the Algerian territory using the helps of some professors and students.

Regarding the sample chosen we will present it in a table that explains the characteristics of this group of enterprises based on many classification criteria.

Table III.4: Type of business Statistics

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agriculture and fishing	37	25,9	30,8	30,8
	Building Materials	20	14,0	16,7	47,5
	transportation	23	16,1	19,2	66,7
	Hotel & Catering	40	28,0	33,3	100,0
	Total	120	83,9	100,0	
Missing	System	23	16,1		
Total		143	100,0		

Source; researcher work based on SPSS outcomes

Figure III.2: Type of Business Statistics

Type_of_business
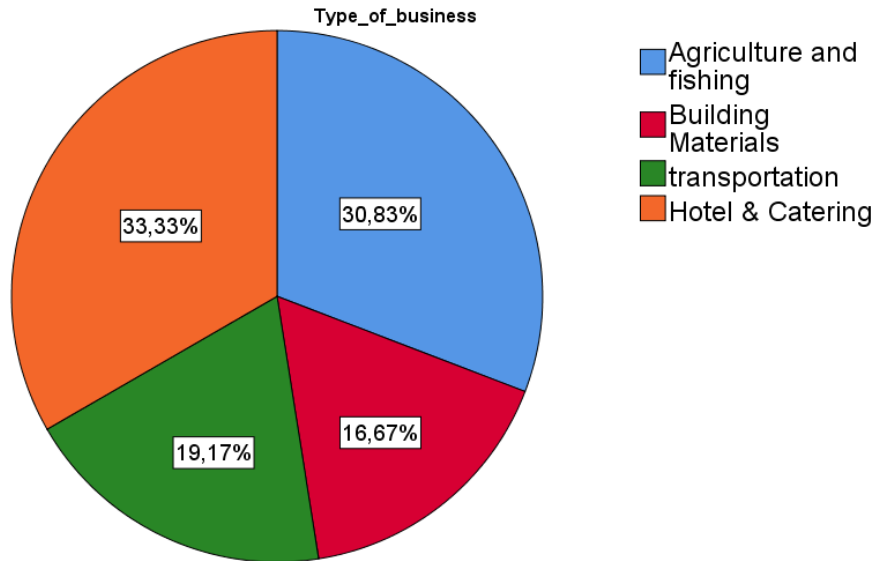
Source; researcher work based on SPSS outcomes

We can see that the total sample was 120 enterprises, distributed between four categories; 37 Agriculture and fishing enterprises, 20 enterprises in Building Materials, 23 in transportation and 40 in Hotel & Catering.

Table III.5: Number of Workers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	from 10 to 49	94	65,7	78,3	78,3
	from 50 to 99	18	12,6	15,0	93,3
	from 100 to 199	8	5,6	6,7	100,0
	Total	120	83,9	100,0	
Missing	System	23	16,1		
Total		143	100,0		

Source; researcher work based on SPSS outcomes

Figure III.3: number of workers
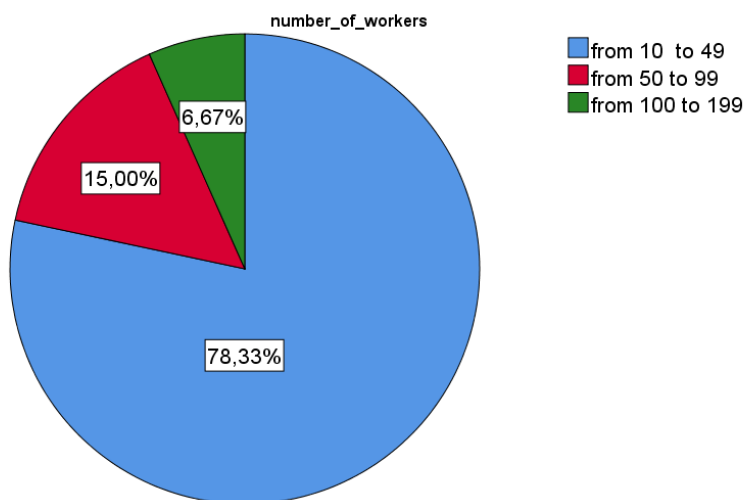
number_of_workers

Source; researcher work based on SPSS outcomes

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We can notice from the previous graph that 78% of the sampled enterprises constitute small enterprises, and 15% of them are between 50 and 100 and lastly 7% are about medium enterprises. Also, I have to mention that all chosen enterprises are private enterprises with no exception, that fact is due to many reasons principally the definition of entrepreneurship. Generally, the public sector is considered to be a poor institutional environment for entrepreneurship. The public sector is viewed as having too many rules or being too risk-adverse to offer opportunities to entrepreneurs.

3.2.3. The Statistical Analysis

In this section we will conduct the discriminant analysis as way to find a statistical relation between the internal variable which is the profits acquired during the past years and the external variables which include the previous mentioned and explained variables gathered in groups by their similarity effects. However, the discriminant analysis requires a certain statistical hypothesizes to be fulfilled and conditions to be met in the term of excellent results but the non-validation of those hypothesis does not make the results falls but less qualified to explain the existing relations in our chosen statistical model.

3.2.3.1. Normality Test
Table III.6: Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Type_of_business	,289	120	,000	,762	120	,000
number_of_workers	,470	120	,000	,531	120	,000
private or public enterprise	.	120	.	.	120	.
date of business starting	,267	120	,000	,786	120	,000
hired manager or the owner	,413	120	,000	,607	120	,000
rate of competitiveness	,505	120	,000	,449	120	,000
the effect of competitiveness	,486	120	,000	,496	120	,000
market share	,392	120	,000	,675	120	,000
evaluation of tax exemption	.	120	.	.	120	.
evaluation of financing agencies	.	120	.	.	120	.
evaluation of interest rates	.	120	.	.	120	.
evaluation of personal financial contribution effect	,399	120	,000	,662	120	,000
evaluation of family support	,230	120	,000	,883	120	,000
evaluation of religion effect on business procedures	,409	120	,000	,643	120	,000
evaluation of social culture and tradition on business	,307	120	,000	,771	120	,000
evaluation of specialized or academic studies effect	,399	120	,000	,662	120	,000
evaluation of previous experience on current business	.	120	.	.	120	.
evaluation of effect of communication with everyone involved	,527	120	,000	,358	120	,000
evaluation of the leadership skills	.	120	.	.	120	.
evaluation of risk taking attitude	.	120	.	.	120	.
evaluation of self-confidence effect on business	.	120	.	.	120	.
instable income effect can be positive or negative	,405	120	,000	,685	120	,000
using quality as entry barrier	,268	120	,000	,786	120	,000
using swot analysis as entry barriers	,447	120	,000	,570	120	,000
using customer relationship management CRM as entry barrier	,535	120	,000	,308	120	,000
collecting information about competition regularly	,363	120	,000	,702	120	,000
seeking new markets that are hard for competitors	,407	120	,000	,654	120	,000

introducing new products with different aspets than competitors	,413	120	,000	,646	120	,000
seeking cost leadership advantage	,509	120	,000	,418	120	,000
getting the best deals from the suppliers to lower the price	,509	120	,000	,418	120	,000
focusing on a marketing campaign to raise the sales as much as possible	,509	120	,000	,418	120	,000
increasing the product quality regularly	,509	120	,000	,418	120	,000
aiming to increase the market share and to invade new markets	,509	120	,000	,418	120	,000
A_quality_control	,441	120	,000	,591	120	,000
B_Cost_control	,363	120	,000	,722	120	,000
C_fast_consumer_needs_fulfillment	,363	120	,000	,722	120	,000
D_improving_innovation_process	,354	120	,000	,705	120	,000
E_choosing_ enterprise _location	,363	120	,000	,722	120	,000
F_marketing_via_exhibitions	,264	120	,000	,799	120	,000
G_marketing_via_catalogues	,251	120	,000	,802	120	,000
using a special team to spread a good word about the enterprise and its products	,457	120	,000	,559	120	,000

a. Lilliefors Significance Correction

Source: SPSS outputs

From the table above using Shapiro-Wilk test, we can notice that all the variables have significance value inferior than 0.05 and even inferior than 0.01 Sig<0.01 which means that none of the above variables are normally distributed.

3.2.3.2. Alpha Cronbach Test

In this point, we will apply the reliability test alpha Cronbach to verify the consistency of the responses and the variances between the different sections; therefore, we will apply the Cronbach's alpha separately to each axis in our questionnaire;

Table III.7; Reliability Statistics (Cronbach's alpha for axis one; entrepreneurship encouragement)

Cronbach's Alpha[a]	Cronbach's Alpha Based on Standardized Items	N of Items
,208	,046	7

Source: SPSS outputs

From the table above we can conclude that 21% of the variability in the composite score by combining those 7 items (axis one; entrepreneurship encouragement) would be be considered true score variance, or internally consistent reliable variance.

Table III.8: Reliability Statistics (Cronbach's alpha for axis one; entrepreneurship encouragement)

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,913	,930	11

Source: SPSS outputs

From the table above we can conclude that 91% of the variability in the composite score by combining those 11 items (axis two; competitive advantage) would be be considered true score variance, or internally consistent reliable variance.

Table III.9: Reliability Statistics (Cronbach's alpha for axis three; competitive advantage factors)

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,871	,843	8

Source: SPSS outputs

From the table above we can conclude that 87% of the variability in the composite score by combining those 8 items (axis three; competitive advantage factors) would be be considered true score variance, or internally consistent reliable variance.

Table III.10; Cronbach's Alpha Value Interpretation

Cronbach's alpha	Internal consistency
alpha >= 0.9	Excellent
0.8 ≤ alpha < 0.9	Good
0.7 ≤ alpha < 0.8	Acceptable
0.6 ≤ alpha < 0.7	Questionable
0.5 ≤ alpha < 0.6	Poor
Alpha < 0.5	Unacceptable

Source: Balqees Naser Ahmed Abdulla Almessabi, « Critical factors in leadership succession planning: securing the human resources future for government organizations in the Abu Dhabi Emirate, UAE» DBA thesis, Southern Cross University, Lismore, NSW, P.90

3.2.3.3. Spearman Correlation Test

Our data are continuous and categorical data and also, they do not follow the normal distribution so the more pertinent correlation test for this type of data is spearman correlation.

Table III.11: Spearman correlation between the three axis and competitive performance

		mean revenue growth	market share
AXIS1_entrepreunarship_encouragement	Correlation Coefficient	,095	,120
	Sig. (2-tailed)	,300	,192
	N	120	120
AXIS2_competitive_advantage	Correlation Coefficient	,247**	,304**
	Sig. (2-tailed)	,007	,001
	N	120	120
AXIS3_competitive_advantage_factors	Correlation Coefficient	,549**	,419**
	Sig. (2-tailed)	,000	,000
	N	120	120

Source: SPSS outputs

From spearman correlation, we can notice that there is a medium significant and positive correlation between the competitive advantage factors and the mean revenue growth 0,549** with significance level of 0,000 less than 0,01, which means that

competitive advantage factors such as quality control, fast consumer needs fulfillment, improving innovation process, choosing enterprise location, marketing via exhibitions, marketing via catalogues mouth to ear, all those variables have a medium positive effect on mean revenue growth, 55% of the increase in mean revenue growth is directly related to competitive advantage factors.

There is a positive medium significant correlation between competitive advantage factors and market share 0,419** with significance level of 0,000 less than 0,01, that means 42% of the increase in market share is directly related to competitive advantage chosen factors.

From spearman correlation, we can also notice that there is a low to medium significant and positive correlation between the competitive advantage and the mean revenue growth 0,247** with significance level of 0,007 less than 0,01, which means that competitive advantage such as SWOT analysis, quality as entry barriers…etc. have a medium to low positive effect on mean revenue growth, 25% of the increase in mean revenue growth is directly related to competitive advantage. The same can be noticed between axis 2; competitive advantage and market share with correlation of 0,304** and significance level of 0,001.

However, there is low positive and non-significant correlation between entrepreneurship encouragement and both mean revenue and market share, 0,095 and 0,120.

Table III.12: Spearman correlation between the three axis and competitive performance

		mean revenue growth	market share
	Sig. (2-tailed)	,000	.
	N	120	120
number_of_workers	Correlation Coefficient	,283**	,672**
	Sig. (2-tailed)	,002	,000
	N	120	120
date of business starting	Correlation Coefficient	,699**	,743**
	Sig. (2-tailed)	,000	,000
	N	120	120

Source: SPSS outputs

From spearman correlation, we can notice that there is a low to medium significant and positive correlation between the number of workers and the mean revenue growth 0, 283** with significance level of 0,002 less than 0.01, and a strong significant and positive correlation between the number of workers and the market share 0, 672** with significance level of 0,000 less than 0.01, that means we can't always perceive the number of workers as a liability and an additional cost, because the current statistics proves that as high the number of workers goes as the mean revenue increase however this relative increase is medium and it affect the market share in a strong way.

we can notice also that there is a strong significant and positive correlation between date of business starting and the mean revenue growth 0.699** with significance level of 0,000 less than 0.01, and a strong significant and positive correlation between the date of business starting and the market share 0, 743** with significance level of 0,000 less than 0.01, that means the years of business establishment have a great effect on both the mean revenue and market share. This phenomenon can be attributed to many factors such as experience, developing new ways to survive in highly competitive environment…etc.

3.2.3.4. Cross-table between independent variables

Some of the variables have interrelation where a clear pattern can be concluded if some of those variables are crossed in the same table.

Figure III.4; Cross-table between type of management and market share
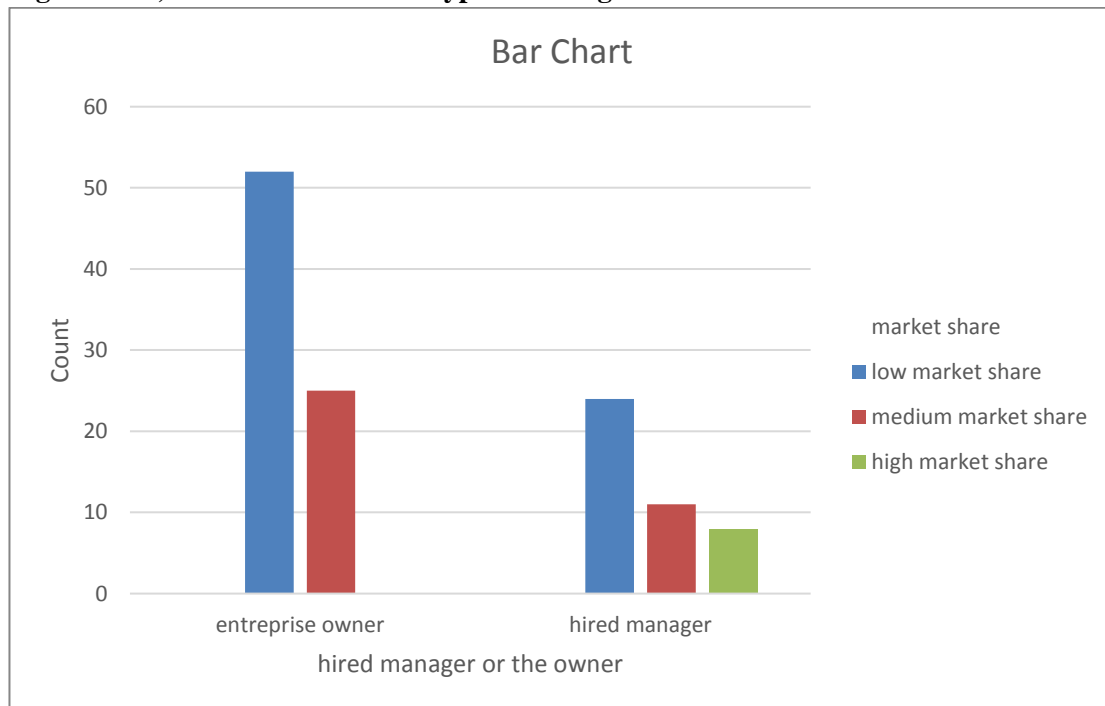
Source: SPSS outputs

From the figure above we can notice that enterprises which are managed by their owner have majorly a low market share with about 25 one has a medium market share, in the other hand the enterprises that are managed by an independent manager have approximately equal proportion between high, medium and small market share.

Figure III.5; Cross-table between type of business and mean revenue

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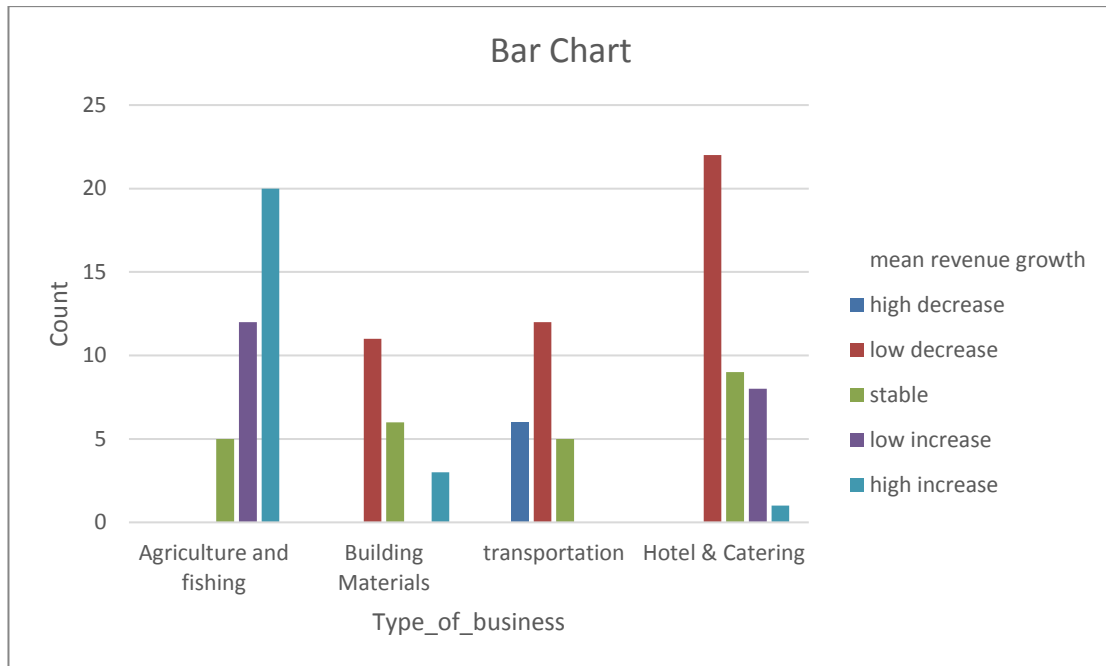
Source: SPSS outputs

From the table above we can notice that most of the agricultural enterprises are in high increase in mean revenue whereas in building materials the biggest distribution is in low decrease. In transportation we find that most companies are in low decrease, in hotel and catering the biggest percentage is in low decrease, this distribution can be affected by many variables such as national political circumstances, and we note that this distribution is not a stable one through time.

Figure III.6; Cross-table between type of management and mean revenue

Source: SPSS outputs

We can notice that most of the enterprises managed by an independent manager have high number of enterprises with low increase in mean revenue. We can notice the same distribution in enterprises managed by their own owner with the distinction that they also have a high number of high increases in mean revenue.

CHAPTER

FOUR

Chapter 4: Results and Discussion

In this chapter we will discuss the results of our field research analyzing all the data gathered during the period of research, and we will explain the results in their natural business context by grouping all the data related to entrepreneurship encouragement in one section and competitive advantage in another section and finally the competitive advantage factors in the last section. In this chapter the results that conclude the research will be commented on accordingly to add more clarification to the surrounding condition that has affected slightly them and discuss the findings.

4.1. Analysis Results

In this section we will present the results and its direct relation with the study in question, starting from entrepreneurship encouragement analysis, competitive advantage analysis and competitive advantage factors analysis. In which we will present the results with a rigorous analysis based on logic and statistical analysis with significance comment about the findings and their significance to the research hypotheses.

4.1.1. Entrepreneurship Encouragement Analysis

We have explored the variables we have included in this axis of the analysis, in which we have described the most relevant factors that contribute positively and negatively in the entrepreneurship ideas, according to experts and practitioners;

Table IV.1: Group Membership Statistics for entrepreneurial behavior

mean revenue growth		Mean	Std. Deviation	Valid N (listwise) Unweighted	Weighted
high decrease	evaluation of tax exemption	5,0000	,00000	6	6,000
	evaluation of financing agencies	5,0000	,00000	6	6,000
	evaluation of interest rates	5,0000	,00000	6	6,000
	evaluation of personal financial contribution effect	5,0000	,00000	6	6,000
	evaluation of family support	3,5000	,54772	6	6,000
	evaluation of religion effect on business procedures	5,0000	,00000	6	6,000
	evaluation of social culture and tradition on business	5,0000	,00000	6	6,000
	evaluation of specialized or academic studies effect	3,0000	,00000	6	6,000
	evaluation of previous experience on current business	5,0000	,00000	6	6,000
	evaluation of effect of communication with everyone involved	5,0000	,00000	6	6,000
	evaluation of the leadership skills	5,0000	,00000	6	6,000
	evaluation of risk-taking attitude	5,0000	,00000	6	6,000
	evaluation of self-confidence effect on business	5,0000	,00000	6	6,000
	instable income effect can be positive or negative	2,0000	,00000	6	6,000
low decrease	evaluation of tax exemption	5,0000	,00000	45	45,000
	evaluation of financing agencies	5,0000	,00000	45	45,000
	evaluation of interest rates	5,0000	,00000	45	45,000
	evaluation of personal financial contribution effect	4,1556	,82450	45	45,000
	evaluation of family support	3,8667	1,12006	45	45,000
	evaluation of religion effect on business procedures	4,5333	,75679	45	45,000
	evaluation of social culture and tradition on business	3,4444	1,25328	45	45,000
	evaluation of specialized or academic studies effect	3,4444	,75545	45	45,000
	evaluation of previous experience on current business	5,0000	,00000	45	45,000
	evaluation of effect of communication with everyone involved	4,8667	,34378	45	45,000
	evaluation of the leadership skills	5,0000	,00000	45	45,000
	evaluation of risk taking attitude	5,0000	,00000	45	45,000
	evaluation of self-confidence effect on business	5,0000	,00000	45	45,000
	instable income effect can be positive or negative	2,2000	,50452	45	45,000
stable	evaluation of tax exemption	5,0000	,00000	25	25,000

	evaluation of financing agencies	5,0000	,00000	25	25,000
	evaluation of interest rates	5,0000	,00000	25	25,000
	evaluation of personal financial contribution effect	4,3200	,80208	25	25,000
	evaluation of family support	3,6000	1,44338	25	25,000
	evaluation of religion effect on business procedures	4,4800	,71414	25	25,000
	evaluation of social culture and tradition on business	3,7600	1,26754	25	25,000
	evaluation of specialized or academic studies effect	3,2000	,50000	25	25,000
	evaluation of previous experience on current business	5,0000	,00000	25	25,000
	evaluation of effect of communication with everyone involved	4,8000	,40825	25	25,000
	evaluation of the leadership skills	5,0000	,00000	25	25,000
	evaluation of risk-taking attitude	5,0000	,00000	25	25,000
	evaluation of self-confidence effect on business	5,0000	,00000	25	25,000
	instable income effect can be positive or negative	3,2000	1,00000	25	25,000
low increase	evaluation of tax exemption	5,0000	,00000	20	20,000
	evaluation of financing agencies	5,0000	,00000	20	20,000
	evaluation of interest rates	5,0000	,00000	20	20,000
	evaluation of personal financial contribution effect	4,8000	,52315	20	20,000
	evaluation of family support	2,7500	1,44641	20	20,000
	evaluation of religion effect on business procedures	4,2500	,96655	20	20,000
	evaluation of social culture and tradition on business	4,4000	,82078	20	20,000
	evaluation of specialized or academic studies effect	3,9500	,94451	20	20,000
	evaluation of previous experience on current business	5,0000	,00000	20	20,000
	evaluation of effect of communication with everyone involved	5,0000	,00000	20	20,000
	evaluation of the leadership skills	5,0000	,00000	20	20,000
	evaluation of risk-taking attitude	5,0000	,00000	20	20,000
	evaluation of self-confidence effect on business	5,0000	,00000	20	20,000
	instable income effect can be positive or negative	3,1500	1,46089	20	20,000
high increase	evaluation of tax exemption	5,0000	,00000	24	24,000
	evaluation of financing agencies	5,0000	,00000	24	24,000
	evaluation of interest rates	5,0000	,00000	24	24,000
	evaluation of personal financial contribution effect	4,9583	,20412	24	24,000
	evaluation of family support	3,3750	,87539	24	24,000
	evaluation of religion effect on business procedures	4,7083	,75060	24	24,000
	evaluation of social culture and tradition on business	4,5833	1,05981	24	24,000
	evaluation of specialized or academic studies effect	3,6667	,63702	24	24,000
	evaluation of previous experience on current business	5,0000	,00000	24	24,000
	evaluation of effect of communication with everyone involved	4,9167	,28233	24	24,000
	evaluation of the leadership skills	5,0000	,00000	24	24,000
	evaluation of risk-taking attitude	5,0000	,00000	24	24,000
	evaluation of self-confidence effect on business	5,0000	,00000	24	24,000
	instable income effect can be positive or negative	2,5000	1,14208	24	24,000
Total	evaluation of tax exemption	5,0000	,00000	120	120,000
	evaluation of financing agencies	5,0000	,00000	120	120,000
	evaluation of interest rates	5,0000	,00000	120	120,000
	evaluation of personal financial contribution effect	4,5000	,74473	120	120,000
	evaluation of family support	3,5083	1,23667	120	120,000
	evaluation of religion effect on business procedures	4,5333	,77712	120	120,000
	evaluation of social culture and tradition on business	3,9750	1,22620	120	120,000
	evaluation of specialized or academic studies effect	3,5000	,74473	120	120,000
	evaluation of previous experience on current business	5,0000	,00000	120	120,000
	evaluation of effect of communication with everyone involved	4,8917	,31210	120	120,000
	evaluation of the leadership skills	5,0000	,00000	120	120,000
	evaluation of risk-taking attitude	5,0000	,00000	120	120,000
	evaluation of self-confidence effect on business	5,0000	,00000	120	120,000
	instable income effect can be positive or negative	2,6167	1,04667	120	120,000

Source; SPSS analysis results

From the table above we can notice that the groups attributed by the discriminant analysis are not equal in numbers; for example; we have 6 enterprises with high decrease in mean revenue, 45 enterprises in low decrease mean revenue, 25 constant revenue growth, 20 in low increase and 24 in high increase mean revenue. This means that the majority of the enterprises included in our sample are in low decrease.

Figure IV.1; the number of enterprises in Axis one on the basis of mean revenue growth
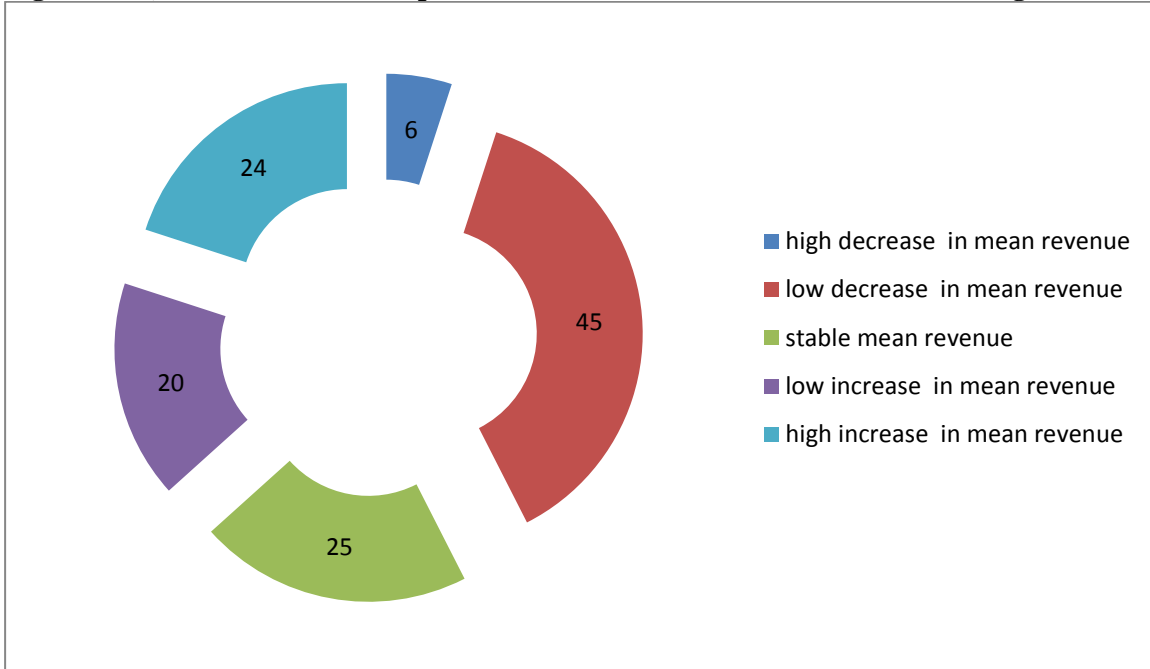
Source; researcher work based onSPSS outcomes.

This figure above is merely the representation of the table that shows the distribution of sample enterprises attributed by the discriminant analysis based on the probability of group membership.

Table IV.2: Test of equality of group means for axis one

	Wilks' Lambda	F	df1	df2	Sig.
evaluation of tax exemption	.a				
evaluation of financing agencies	.a				
evaluation of interest rates	.a				
evaluation of personal financial contribution effect	,780	8,088	4	115	,000
evaluation of family support	,902	3,139	4	115	,017
evaluation of religion effect on business procedures	,948	1,569	4	115	,187
evaluation of social culture and tradition on business	,818	6,410	4	115	,000
evaluation of specialized or academic studies effect	,870	4,311	4	115	,003
evaluation of previous experience on current business	.a				
evaluation of effect of communication with everyone involved	,952	1,455	4	115	,221
evaluation of the leadership skills	.a				
evaluation of risk taking attitude	.a				
evaluation of self-confidence effect on business	.a				
instable income effect can be positive or negative	,811	6,692	4	115	,000

a. Cannot be computed because this variable is a constant.
Source; SPSS outcomes

From the table above, we can notice that wilks-lambda of most of the variables is statistically significant, **0.000, 0.017, 0,000, 0,003, 0.000** all of which are less than 0.05. This means that the quality of the discriminant analysis prediction is fairly good to give significant results.

Table VI.3: Pooled Within-Groups Matrices (Inter-correlations) for axis one

		V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11	V12	V13	V14
Correlation	V1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	V2	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	V3	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	V4	.	.	.	1,000	-,299	,390	,495	-,299	.	,271	.	.	.	-,297
	V5	.	.	.	-,299	1,000	-,228	-,090	,169	.	,257	.	.	.	,383
	V6	.	.	.	,390	-,228	1,000	,484	-,354	.	,219	.	.	.	-,677
	V7	.	.	.	,495	-,090	,484	1,000	-,465	.	,489	.	.	.	-,563
	V8	.	.	.	-,299	,169	-,354	-,465	1,000	.	-,199	.	.	.	,413
	V9	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	V10	.	.	.	,271	,257	,219	,489	-,199	.	1,000	.	.	.	-,199
	V11	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	V12	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	V13	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	V14	.	.	.	-,297	,383	-,677	-,563	,413	.	-,199	.	.	.	1,000

V1: evaluation of tax exemption

V2: evaluation of financing agencies

V3: evaluation of interest rates

V4: evaluation of personal financial contribution effect

V5: evaluation of family support

V6: evaluation of religion effect on business procedures

V7: evaluation of social culture and tradition on business

V8: evaluation of specialized or academic studies effect

V9: evaluation of previous experience on current business

V10: evaluation of effect of communication with everyone involved

V11: evaluation of the leadership skills

V12: evaluation of risk taking attitude

V13: evaluation of self-confidence effect on business

V14: instable income effect can be positive or negative

Source: SPSS outcomes

From the table above none of the inter-correlations of variables in this axis are significantly high, which means there are no high correlated variables that affect the quality of the discriminant analysis.

Table IV.4: M box test results for axis one

Box's M		78,317
F	Approx.	2,446
	df1	28
	df2	8805,870
	Sig.	,000

Tests null hypothesis of equal population covariance matrices.

a. Some covariance matrices are singular and the usual procedure will not work. The non-singular groups will be tested against their own pooled within-groups covariance matrix. The log of its determinant is -5,231.

H0 = equal population covariance matrices

H1 ≠ equal population covariance matrices

Source: researcher work based on SPSS outputs

From the table above we notice that the significance level is 0.000 which is less than 0.05, so we reject the null hypothesis of equal population covariance matrices and accept the H1. This is a bad thing which means that the discriminant analysis will be affected negatively with none equal population covariance matrices. However many mathematical studies point out

that the failure in M box test diminish the quality of discriminant analysis but does not affect it significantly and the results will still be valid in this case.

Table VI.5: Canonical Discriminant Function Coefficients For axis one

	Function			
	1	2	3	4
evaluation of personal financial contribution effect	,172	-,746	**,840**	,330
evaluation of family support	-,538	-,138	,584	,318
evaluation of religion effect on business procedures	,201	,715	,423	,444
evaluation of social culture and tradition on business	,822	,026	,361	-,140
evaluation of specialized or academic studies effect	,563	**-1,125**	-,321	**,822**
evaluation of effect of communication with everyone involved	,204	-,514	**-2,294**	**-2,076**
instable income effect can be positive or negative	**1,131**	**1,139**	-,031	,195
(Constant)	-8,999	3,966	3,246	2,709

Unstandardized coefficients

(the highlighted values are the significant predictors both positive and negative ones)

Source: SPSS outcomes

From the table above we can see that there are four group assigned by the discriminant analysis based on the prediction of group membership;

D1= -8.999+ 0.172X1-0.538X2+0.201X3+0.822X4+0.204X5+0.204X6+1.131X7
D2= +3,966- 0,746X1-0.138X2+0.715X3+0.026X4 -0.514X5-0.514X6 +1.139X7
D3= +3,246+ 0. 840X1-0.584X2+0.423X3+0.361X4-2.294X5-2.294X6 - 0.031X7
D4= +2,709+ 0. 330X1-0.318X2+0.444X3+0.822X4-2.076X5-0.2076X6+0.195X7

X1: evaluation of personal financial contribution effect
X2: evaluation of family support
X3: evaluation of religion effect on business procedures
X4: evaluation of social culture and tradition on business
X5: evaluation of specialized or academic studies effect
X6: evaluation of effect of communication with everyone involved
X7: instable income effect can be positive or negative

Figure IV.2; territorial map for competitive advantage discriminant analysis
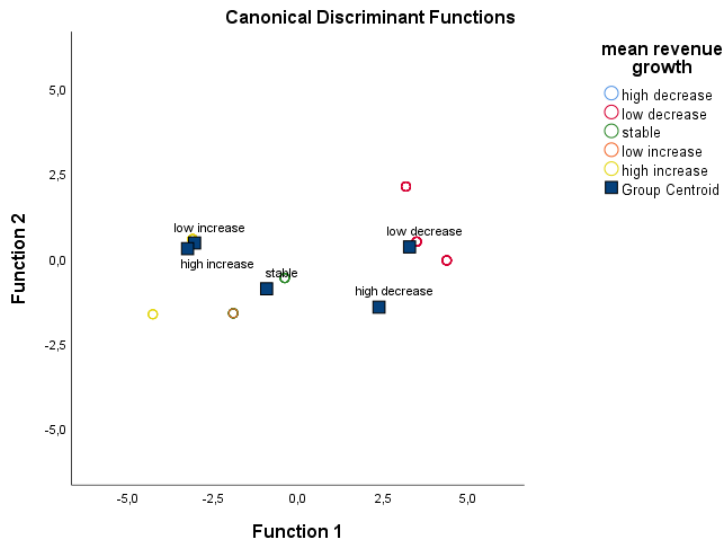
Source: researcher work based on spss outcomes

The figure above is a representation of the distribution of discriminant analysis of the first axis; the entrepreneurial factors, in two dimension dispersion figure, which locate each competitive groups in territorial map. We can notice that all the groups are situated in a close area, which mean that the statistical difference between the five classes is minimal.

The first equation discriminate between the the low decrease in mean revenue and the high decrease in mean revenue, from that equation we can notice that X7 is the most significant predictor of the entrepreneurship behavior with a value of **1.131** which means that most new entrepreneurs are mostly encouraged by the availability of relative revenue depending on their own work, a young entrepreneur would lie to earn more depending on his work and he is ready to work more for more revenue, however on the negative side an unstable revenue can threaten his basic life needs because if he can't gain enough to ensure his daily need it will be a threat to engage in such a risky business. So according to our sample and our basic research we can conclude that an entrepreneurial mind is a risk averse one that would like to gain more and more without risking his minimum life needs, and for that reason most entrepreneurs would like to see the positive side of the unstable revenue by dreaming to get more revenue and succeed and ignore the negative in which the entrepreneur may risk his business and his basic need if the new enterprise will not provide enough to live a financially secured life, so this method of thinking can point to the fact that the entrepreneurs can choose to be optimistic or pessimistic according to their initial believe and environmental personal analysis. If an entrepreneur choose to believe a positive or a negative point of view this will affect its real engagement and work in his new enterprise or event prevent him from starting one if his system of believe is inclined toward the risk of failure. Based on that information we conclude also that instable income can be positive factor toward entrepreneurial behavior or entrepreneurial behavioral inhibitor if the risk analysis of the person is inclined toward low revenue. I believe that the system of risk analysis is different from a person to other because he lacks the accurate information to estimate the risk fairly, for that reason most Algerian

entrepreneurs will rely on the past experiences of local entrepreneurs as a basic risk analysis factor, they will construct an information system based on the experience of their neighbors, colleagues, fellows, and colleagues whom already started a similar business in the same region with the same conditions and environmental characteristics, this estimation would give each new entrepreneur a conclusion to start a new business or not and if the results of this personal analysis process are inclined toward a high unstable revenue this will encourage the starting of new enterprises.

In the second function that discriminate between the low decrease and stable mean revenue; we can notice that the "*evaluation of specialized or academic studies effect*" **-1,125** and "*instable income effect can be positive or negative*" **1,139** are the most significant predictable factors that differentiate between the low decrease group and stable revenue group, this statistic reflect the fact that academic studies are a necessary factors to guarantee a stable revenue especially with the continuous economic and environmental change that affect the enterprise, alongside with the instable income in which we explained its impact before. The skills required to manage a new enterprise are both managerial and technical, for example an entrepreneur in agricultural field is required to have a minimal knowledge about bank techniques and financial management to handle the daily transaction between the enterprise and the banks and the other institutions to guarantee a fluid work interactions with the complementary enterprises whether governmental or private ones like insurance companies. In other hand the specialized studies ensure a basic skills level to know the daily problems and how to overcome them, if an entrepreneur in beekeeping with a small farm, it is required to have a specialized course about this craft and how to manage the different possibilities either opportunities or threats to keep the business running and inure a stable level of income in this enterprise. Those statistics suggests that stable outcomes require both academic and technical skills, and all of the entrepreneurs included in the sample that have been reported as a stable revenue enterprises are either have academic or specialized learning and also a inclination to benefit from the effect of instable income to raise the revenue with hard work and they have the tendency to give more work and time to grow their business. However in our case the predict variable have a negative value concerning "*evaluation of specialized or academic studies effect*" this result can be due to the fact that most of the entrepreneurs included in our sample are lacking a high education skills which has affected their evaluation of this factor and they gave a subjective answer that reflect their education level. The second possibility is that a highly educated people are mostly risk avert businessmen which inhibit them from accepting any reasonable level of risk and for that reason they are inclined to work in firms and other enterprises rather than taking the risk required to open a new enterprise. Those are only the researcher opinions and personal explanation based on the daily observation however further study for those reasons require a rigorous study.

In the third discriminant function that discriminate between stable mean growth and the low increase in revenue, we notice that "*evaluation of effect of communication with everyone involved*" is the most significant predictor in the equation. From that statistic we conclude that a transition from stable revenue to low increase in revenue require a great communication

skills, the communication skills is required to be a good leader and to direct the work staff toward one precise goal, for that reason the manager or in our case the entrepreneur is required to be a skilled communicator to have a significant impact on the staff and the partners to ensure a sustainable growth in changing economic and competitive environment, the skills to lead are directly related to the skills of communication in which the enterprise can promote its competitive status from a stable mean revenue to a low increase revenue. However this predictor in our case is a negative value, this reflects its importance in the point of view of the selected entrepreneurs in the sample, in our case they evaluate the "*personal financial contribution effect*" **0,840** as the significant positive predictor due to the importance of the personal contribution in the growth of mean revenue from stable to low increase, it is only explained by the personal feeling of involvement in the enterprise this will engender a sense of a greater responsibility that will transform in a much harder work and a longer business hours and staff engagement in enterprise goal achievement.

The third function that describes the transition from low increase revenue to high increase revenue is also depending on communication skills, as a main predictor of this transition, the communication skills according to the discriminant function is highly related to high increase revenue, with highly positive significant predictor of "*evaluation of specialized or academic studies effect*" **0.822** which we have already explained its impact on enterprise formation and management and especially its impact on mean revenue growth. On the other hand the most negative predictor in this discriminant function is "*communication with everyone involved*" **-2.076** also we have explained its positive impact and what's the most likely possibilities that explained its negative value in our sample study.

4.1.2. Competitive Advantage Analysis

In this section we will explore the most contributing factors in predicting the effect of different competitive advantages in promoting and growing the mean revenue of the enterprise;

Table IV.6: Group membership statistics for competitive advantage analysis

mean revenue growth		Mean	Std. Deviation	Valid N (listwise) Unweighted	Weighted
high decrease	using quality as entry barrier	4,0000	,00000	6	6,000
	using swot analysis as entry barriers	5,0000	,00000	6	6,000
	using customer relationship management CRM as entry barrier	5,0000	,00000	6	6,000
	collecting information about competition regularly	5,0000	,00000	6	6,000
	seeking new markets that are hard for competitors	5,0000	,00000	6	6,000
	introducing new products with different aspects than competitors	5,0000	,00000	6	6,000
	seeking cost leadership advantage	5,0000	,00000	6	6,000
	getting the best deals from the suppliers to lower the price	5,0000	,00000	6	6,000
	focusing on a marketing campaign to raise the sales as much as possible	5,0000	,00000	6	6,000
	increasing the product quality regularly	5,0000	,00000	6	6,000
	aiming to increase the market share and to invade new markets	5,0000	,00000	6	6,000

low decrease	using quality as entry barrier	3,1556	,97597	45	45,000
	using swot analysis as entry barriers	4,6222	,49031	45	45,000
	using customer relationship management CRM as entry barrier	4,8889	,31782	45	45,000
	collecting information about competition regularly	4,2444	,64511	45	45,000
	seeking new markets that are hard for competitors	4,5556	,54588	45	45,000
	introducing new products with different aspects than competitors	4,1778	,91176	45	45,000
	seeking cost leadership advantage	4,5111	,86923	45	45,000
	getting the best deals from the suppliers to lower the price	4,5111	,86923	45	45,000
	focusing on a marketing campaign to raise the sales as much as possible	4,5111	,86923	45	45,000
	increasing the product quality regularly	4,5111	,86923	45	45,000
	aiming to increase the market share and to invade new markets	4,5111	,86923	45	45,000
stable	using quality as entry barrier	3,9600	,84063	25	25,000
	using swot analysis as entry barriers	4,6400	,48990	25	25,000
	using customer relationship management CRM as entry barrier	4,8800	,33166	25	25,000
	collecting information about competition regularly	4,4400	,58310	25	25,000
	seeking new markets that are hard for competitors	4,3200	,74833	25	25,000
	introducing new products with different aspects than competitors	4,2800	,93630	25	25,000
	seeking cost leadership advantage	4,7600	,43589	25	25,000
	getting the best deals from the suppliers to lower the price	4,7600	,43589	25	25,000
	focusing on a marketing campaign to raise the sales as much as possible	4,7600	,43589	25	25,000
	increasing the product quality regularly	4,7600	,43589	25	25,000
	aiming to increase the market share and to invade new markets	4,7600	,43589	25	25,000
low increase	using quality as entry barrier	4,9500	,22361	20	20,000
	using swot analysis as entry barriers	4,7500	,44426	20	20,000
	using customer relationship management CRM as entry barrier	5,0000	,00000	20	20,000
	collecting information about competition regularly	4,6000	,50262	20	20,000
	seeking new markets that are hard for competitors	4,5500	,60481	20	20,000
	introducing new products with different aspects than competitors	5,0000	,00000	20	20,000
	seeking cost leadership advantage	5,0000	,00000	20	20,000
	getting the best deals from the suppliers to lower the price	5,0000	,00000	20	20,000
	focusing on a marketing campaign to raise the sales as much as possible	5,0000	,00000	20	20,000
	increasing the product quality regularly	5,0000	,00000	20	20,000
	aiming to increase the market share and to invade new markets	5,0000	,00000	20	20,000
high increase	using quality as entry barrier	4,7083	,85867	24	24,000
	using swot analysis as entry barriers	4,8333	,38069	24	24,000
	using customer relationship management CRM as entry barrier	4,9167	,28233	24	24,000
	collecting information about competition regularly	4,9583	,20412	24	24,000
	seeking new markets that are hard for competitors	4,9583	,20412	24	24,000
	introducing new products with different aspects than competitors	4,7500	,67566	24	24,000
	seeking cost leadership advantage	5,0000	,00000	24	24,000
	getting the best deals from the suppliers to lower the price	5,0000	,00000	24	24,000

	focusing on a marketing campaign to raise the sales as much as possible	5,0000	,00000	24	24,000
	increasing the product quality regularly	5,0000	,00000	24	24,000
	aiming to increase the market share and to invade new markets	5,0000	,00000	24	24,000
Total	using quality as entry barrier	3,9750	1,08048	120	120,000
	using swot analysis as entry barriers	4,7083	,45644	120	120,000
	using customer relationship management CRM as entry barrier	4,9167	,27754	120	120,000
	collecting information about competition regularly	4,5250	,59356	120	120,000
	seeking new markets that are hard for competitors	4,6083	,58404	120	120,000
	introducing new products with different aspects than competitors	4,4917	,83006	120	120,000
	seeking cost leadership advantage	4,7667	,60437	120	120,000
	getting the best deals from the suppliers to lower the price	4,7667	,60437	120	120,000
	focusing on a marketing campaign to raise the sales as much as possible	4,7667	,60437	120	120,000
	increasing the product quality regularly	4,7667	,60437	120	120,000
	aiming to increase the market share and to invade new markets	4,7667	,60437	120	120,000

Source; researcher work based SPSS outcomes

From the table above we can notice that the groups attributed by the discriminant analysis are the same as the previous discriminant analysis, therefore the group membership probability based on the entrepreneurial behavior is similar to the group membership probability based on competitive advantage analysis. This means that the entrepreneurs who have been included in our sample have approximately a similar evaluation for entrepreneurial behavior with the evaluation of competitive advantages that effect the mean revenue growth, and in the detailed discriminant analysis we will explores furthermore the differences in values. However we can notice a difference in value means for example the mean for "*using quality as entry barrier*" is **3,9750** and the mean answer for the first factor in the previous analysis is "*evaluation of tax exemption*" is **5.00** this difference underlines the difference in variable importance attributed by responders.

Figure IV.3; the number of enterprises in Axis two on the basis of mean revenue growth
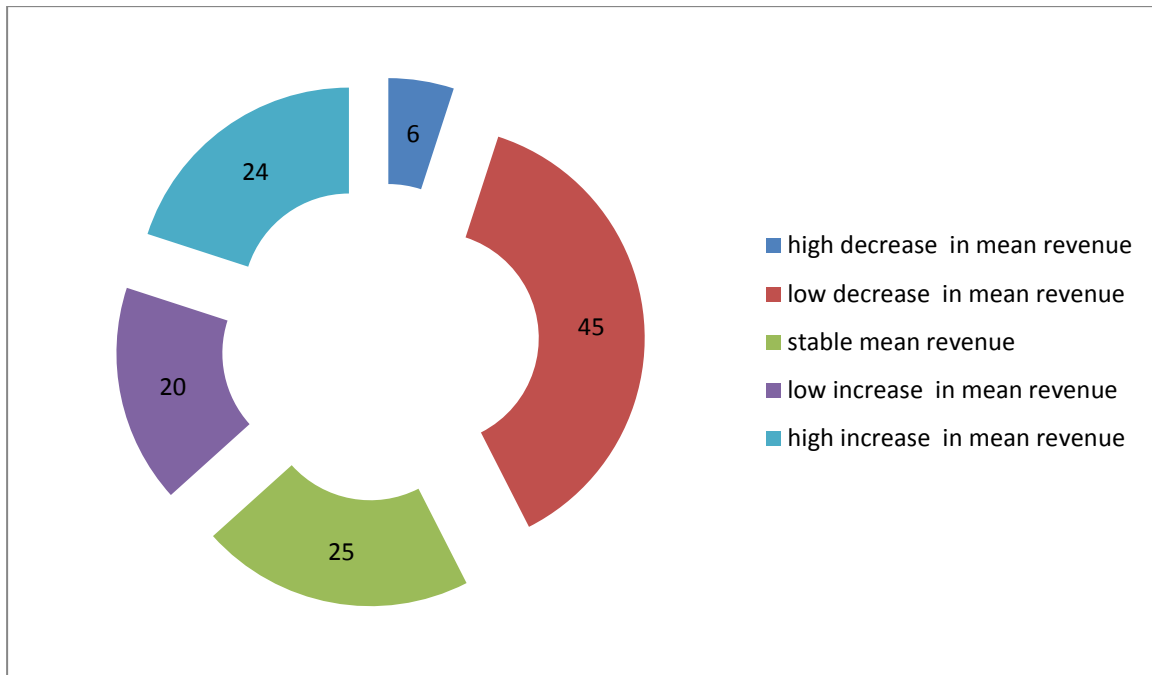
Source; researcher work based on spss outcomes.

This figure is similar to the previous one due to the similarities in group membership statistics attributed by the discriminant analysis based on the first axis (entrepreneurial behavior and engagement) and the second axis (competitive analysis).

Table IV.7: Tests of Equality of Group Means for axis two

	Wilks' Lambda	F	df1	df2	Sig.
using quality as entry barrier	,553	23,270	4	115	,000
using swot analysis as entry barriers	,945	1,682	4	115	,159
using customer relationship management CRM as entry barrier	,973	,802	4	115	,526
collecting information about competition regularly	,769	8,649	4	115	,000
seeking new markets that are hard for competitors	,849	5,116	4	115	,001
introducing new products with different aspets than competitors	,831	5,856	4	115	,000
seeking cost leadership advantage	,870	4,306	4	115	,003
getting the best deals from the suppliers to lower the price	,870	4,306	4	115	,003
focusing on a marketing campaign to rise the sales as much as possible	,870	4,306	4	115	,003
increasing the product quality regularly	,870	4,306	4	115	,003
aiming to increase the market share and to invade new markets	,870	4,306	4	115	,003

Source: researcher work based on spss outcomes

From the table above, we can notice that wilks-lambda of most of the variables is statistically significant, **0.000, 0.000, 0,02, 0,00, 0.03** all of which are less than 0.05. This means that the quality of the discriminant analysis prediction is fairly good to give significant results.

Table IV.8: Pooled Within-Groups Matrices (Inter-correlations) for axis Two

		V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11
Correlation	V1	1,000	,209	,423	,302	,188	,433	,059	,059	,059	,059	,059
	V2	,209	1,000	,463	,399	,208	,589	,589	,589	,589	,589	,589
	V3	,423	,463	1,000	,145	,094	,577	,536	,536	,536	,536	,536
	V4	,302	,399	,145	1,000	,652	,421	,316	,316	,316	,316	,316

V5	,188	,208	,094	,652	1,000	,270	,170	,170	,170	,170	,170
V6	,433	,589	,577	,421	,270	1,000	,760	,760	,760	,760	,760
V7	,059	,589	,536	,316	,170	,760	1,000	1,000	1,000	1,000	1,000
V8	,059	,589	,536	,316	,170	,760	1,000	1,000	1,000	1,000	1,000
V9	,059	,589	,536	,316	,170	,760	1,000	1,000	1,000	1,000	1,000
V10	,059	,589	,536	,316	,170	,760	1,000	1,000	1,000	1,000	1,000
V11	,059	,589	,536	,316	,170	,760	1,000	1,000	1,000	1,000	1,000

V1: using quality as entry barrier

V2: using swot analysis as entry barriers

V3: using customer relationship management CRM as entry barrier

V4: collecting information about competition regularly

V5: seeking new markets that are hard for competitors

V6: introducing new products with different aspects than competitors

V7: seeking cost leadership advantage

V8: getting the best deals from the suppliers to lower the price

V9: focusing on a marketing campaign to raise the sales as much as possible

V10: increasing the product quality regularly

V11: aiming to increase the market share and to invade new markets

Source; research work based on spss outputs

From the table above we can notice that there is a significant positive correlation between variable V6; introducing new products with different aspects than competitors and V7; seeking cost leadership advantage, V8; getting the best deals from the suppliers to lower the price, V9; focusing on a marketing campaign to raise the sales as much as possible V10; increasing the product quality regularly and V11; aiming to increase the market share and to invade new markets, the correlation between those variables is 0.760 which is a high positive correlation between those variables, the explanation for this is that some advantages are required to acquire the other advantages; for instance if an enterprise is focusing on a competitive advantage based cost leadership or focusing on an intense marketing campaign or increasing product quality or even increasing the market share and invade new markets, there is a high probability that those advantages can be reached though introducing new products which explain the evacuation given by the entrepreneurs included in our sample.

There is also a perfect correlation between V7; seeking cost leadership advantage and V8, V9, V10 and V11 with the value of 1.00 which is the maximum positive correlation, statistically speaking this can only be interpreted by the fact that those advantages are perfectly required to achieve the advantage V7 according to the entrepreneurs in our sample. The cost leadership advantage require many other advantages such as getting the best deals from the suppliers to lower the price, focusing on a marketing campaign to raise the sales as much as possible, increasing the product quality regularly and aiming to increase the market share and to invade new markets. It means that cost leadership is based on two principal aspects; the first is minimizing the costs by getting the best deals or increasing the product quality using the best efficient raw materials and in the other hand a cost leadership advantage can be acquired through increased sales to achieve the scale economy and this in turn necessitate an intense marketing comparing and increasing market share or invading new markets.

In our research the responders answer each question separately, so the analysis of internal effect between variables is highly unlikely in our case. So statistically speaking it means

that the the group of entrepreneurs who belong to the same mean revenue growth category have the same evaluation of the importance of variable V7, V8, V9, V10, V11.

For a high quality discriminant analysis prediction it is required to have the minimum intern-correlation between variables. In our cases there are some variable which high internal correlation which can affect our discriminant analysis negatively and lower the precision of membership probability.

Table IV.9: M box Test Results for axis two

Box's M		77,843
F	Approx.	2,432
	df1	28
	df2	8805,870
	Sig.	,000

Tests null hypothesis of equal population covariance matrices.
a. Some covariance matrices are singular and the usual procedure will not work. The non-singular groups will be tested against their own pooled within-groups covariance matrix. The log of its determinant is -10,031.
H0 = equal population covariance matrices
H1 ≠ equal population covariance matrices
Source: researcher work based on SPSS outputs

From the table above we notice that the significance level is 0.000 which is less than 0.05, so we reject the null hypothesis of equal population covariance matrices and accept the H1. This is a bad thing which means that the discriminant analysis will be affected negatively with none equal population covariance matrices. This will diminish the quality of discriminant analysis but does not affect it significantly and the results will still be valid in this case.

Table IV.10: Canonical Discriminant Function Coefficients For axis two

	Function			
	1	2	3	4
using quality as entry barrier	**1,486**	-,276	,055	-,631
using swot analysis as entry barriers	-,338	,563	-,357	,181
using customer relationship management CRM as entry barrier	-2,109	-,074	,295	,925
collecting information about competition regularly	,317	,333	-1,309	**1,946**
seeking new markets that are hard for competitors	-,270	**1,490**	,435	-1,751
introducing new products with different aspects than competitors	-,889	,297	**1,888**	,904
seeking cost leadership advantage	**1,968**	-,516	-1,338	-,746
(Constant)	,476	-8,439	1,821	-4,125

Unstandardized coefficients
The highlighted numbers are the most significant values
Source: researcher outputs based on SPSS outputs

From the table above we can see that there are four group assigned by the discriminant analysis based on the prediction of group membership;

D1= 0.476+ 1.486X1-0.338X2-2.109X3+0.317X4-0.270X5-0.889X6+1.968X7
D2= -8.439-0.276X1+0.563X2-0.074X+3,333X4+1.490X5+0.297X6-0.516X7
D3= 1,821+0.055X1-0.357X2+0.295X3-1.309X4+0.435X5+1.888X6-1.338X7
D4= -4,125-0.631X1+0.181X2+0.925X3+0.946X4-1.751X5+0.904X6-0.746X7

X1: using quality as entry barrier

X2: using SWOT analysis as entry barriers

X3: using customer relationship management CRM as entry barrier

X4: collecting information about competition regularly

X5: seeking new markets that are hard for competitors

X6: introducing new products with different aspects than competitors

X7: seeking cost leadership advantage

Figure IV.4; territorial map for competitive advantage discriminant analysis
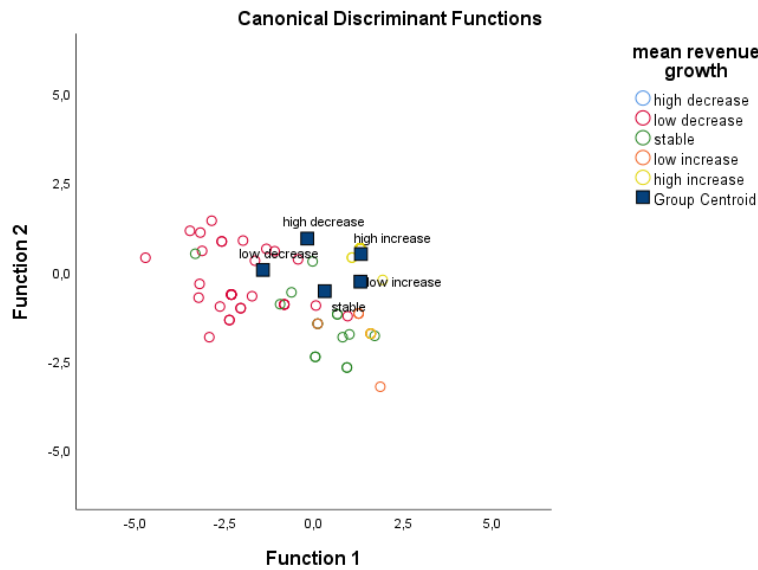
Source: researcher work based on spss outcomes

The figure above is a representation of the distribution of discriminant analysis of the second axis; the competitive advantages, in two dimension dispersion figure, which locate each competitive groups in territorial map. We can notice that all the groups are situated in a close area, which mean that the statistical difference between the five classes is minimal.

From the first discriminant function which discriminant between high decrease in mean revenue group and low decrease mean revenue group according to the competitive advantage axis, we notice that the variables "*seeking cost leadership advantage*" with the value **1,968** and "*using quality as entry barrier*" with the value **1,486** are the most predictors in this first function, this means that the groups that have low decrease revenue and high decrease revenue are significantly different in those particular variables.

Seeking cost leadership advantage is the mean competitive advantage of the new entrepreneurs and also the entrepreneurs with high decrease revenue, this statistic is probably due to the fact that seeking cost leadership advantage can be achieved only by the old enterprises with much experience which allow them to to control some of the environmental factors, also this strategy require a lot of financial and technical resources to innovate and master all of the

value chain aspects, those are characteristics of highly effective entrepreneurs unlike those in the in this group who have low mean revenue.

Using quality as entry barrier is also a hard advantage to achieve and all the enterprises that use this type of advantage are probably in a monopolistic state with a lot of resources and much advanced learning curve. For an enterprise to use this advantage it must master the initial quality and have a large supply network to change the raw materials for others with better quality and cheap prices, or have a large supply quantities of raw materials which allows them to have more negotiating power over the suppliers, in our case most of the enterprises included in our sample they operate locally, all their complementary enterprises like banks and suppliers and distributors are in near distance from the base of the entreprise also their buyers and consumers are also located in the majority in nearby geographic locations. The enterprises who have high decrease to low decrease in mean revenue are seeking the quality entry barrier and the cost leadership advantage.

In the second function which discriminant between low decrease in mean revenue and stable mean revenue we can notice that "*seeking new markets that are hard for competitors*" With the value **1,490** is the most significant predictor, this means that for an enterprise to progress from low decrease in mean revenue to a stable revenue growth it is required to seek new markets that can't be accessed by competitors, it is similar to the Philip Kotler competitive strategy that is called "the niche strategy"; it is typically used by startups who do not have enough funds for promotion, marketing and sales on the markets with little or no market gaps. Niche strategy is put in practice when a company comes up with a product or service that fills a market niche. Using this strategy, a rapid growth and even market dominance can be achieved very quickly (although the market might not be very large) since there is minimal or no competition in the market niche.

In the third discriminant function that discriminant between the stable revenue growth group and the low increase in mean revenue group, the most significant predictor is "*introducing new products with different aspects than competitors*" with the value of **1,888**. According to that statistic, for an enterprise to promote from stable revenue to a low decrease revenue it is required to introduce new products with different aspects that competitors which constitute the starting of an efficient competition based on new product lines and new quality with a desirable product or service characteristics, the consumer in this stage is part of the design and production stage, it is becoming the center of the enterprise goals. This efficient competition that relay on new products rather that lowering the existing price can promote the enterprise and gain a new market share, all the enterprises included in our research especially in hotels business and restaurants are using this advantage to compete unlike some of the constructing and building enterprises that does not innovate new ways and relay on what exists in the major cases expect the big enterprises who introduce from time to time new way to build or to decorate apartments and buildings, also they innovate in the design by using some of the different architectural structurs however this minor change is meanly driven by the fact that all the operating enterprise have almost the same product and service lines which make make

the competition very weak and less intense and does not encourage the enterprise to make significant efforts, also the sophistication of the demand is does not put the necessary pressure on the enterprise to drive them to innovate and introduce new products. The most important factor that make the enterprises less competitive in terms of new products with new aspects is the fact that no matter what they will introduce the international companies are very innovative which makes the minors changes in the new products introduced by the Algerian enterprise less interesting for the consumers compared to the international enterprises that have enormous resources and more than seventy years of experiences that allowed them to master the new technologies whith a reasonable costs that makes their new products very competitive not to mention the intense marketing complain especially in the special events of the year. Many factors contribute to the introducing of new products that cannot be all included in the present research.

In the last discriminant function we notice that "*collecting information about competition regularly"* is the most significant predictor with the value of **1,946** this means that in order for an enterprise to move from the low increase revenue stage to the high increase revenue growth, it need to collect information about other competitors in order to develop a special advantage that will give the enterprise an edge in the existing markets, and if we consider the discriminant function as a type of a multiple regression analysis it is fair to say that increasing the collect of information process by 1.946% will increase the mean revenue by 1% in a context of comparison between the group of enterprises with low increase revenue and the group of enterprises with high increase in mean revenue.

4.1.3. Competitive Advantage Factors Analysis

In this section we will explore the most contributing factors in predicting the effect of different competitive advantage factors in promoting and growing the mean revenue of the enterprise;

Table IV.11: Group membership statistics for competitive advantage factors analysis

mean revenue growth		Mean	Std. Deviation	Valid N (listwise) Unweighted	Weighted
High Decrease	A_quality_control	5,0000	,00000	6	6,000
	B_Cost_control	5,0000	,00000	6	6,000
	C_fast_consumer_needs_fulfillment	5,0000	,00000	6	6,000
	D_improving_innovation_process	5,0000	,00000	6	6,000
	E_choosing_enterprise_location	5,0000	,00000	6	6,000
	F_marketing_via_exhibitions	3,0000	,00000	6	6,000
	G_marketing_via_catalogues	3,0000	,00000	6	6,000
	H- using a special team to spread a good word about the enterprise and its products	3,0000	,00000	6	6,000
low decrease	A_quality_control	3,8222	1,26651	45	45,000
	B_Cost_control	3,3333	1,08711	45	45,000
	C_fast_consumer_needs_fulfillment	3,3333	1,08711	45	45,000
	D_improving_innovation_process	3,0889	1,23991	45	45,000
	E_choosing_enterprise_location	3,3333	1,08711	45	45,000
	F_marketing_via_exhibitions	2,8000	,40452	45	45,000
	G_marketing_via_catalogues	2,5556	,50252	45	45,000
	H-using a special team to spread a good word about the enterprise and its products	3,9778	1,01105	45	45,000
stable	A_quality_control	4,6400	,48990	25	25,000

	B_Cost_control	4,4000	,50000	25	25,000
	C_fast_consumer_needs_fulfillment	4,4000	,50000	25	25,000
	D_improving_innovation_process	3,9200	1,18743	25	25,000
	E_choosing_enterprise_location	4,4000	,50000	25	25,000
	F_marketing_via_exhibitions	4,0000	,64550	25	25,000
	G_marketing_via_catalogues	3,5200	1,08474	25	25,000
	H_using a special team to spread a good word about the enterprise and its products	3,2400	,43589	25	25,000
low increase	A_quality_control	4,9500	,22361	20	20,000
	B_Cost_control	4,9500	,22361	20	20,000
	C_fast_consumer_needs_fulfillment	4,9500	,22361	20	20,000
	D_improving_innovation_process	4,9500	,22361	20	20,000
	E_choosing_enterprise_location	4,9500	,22361	20	20,000
	F_marketing_via_exhibitions	4,9500	,22361	20	20,000
	G_marketing_via_catalogues	4,9500	,22361	20	20,000
	H_using a special team to spread a good word about the enterprise and its products	3,0000	,00000	20	20,000
high increase	A_quality_control	5,0000	,00000	24	24,000
	B_Cost_control	5,0000	,00000	24	24,000
	C_fast_consumer_needs_fulfillment	5,0000	,00000	24	24,000
	D_improving_innovation_process	4,6250	1,01350	24	24,000
	E_choosing_enterprise_location	5,0000	,00000	24	24,000
	F_marketing_via_exhibitions	5,0000	,00000	24	24,000
	G_marketing_via_catalogues	4,6250	1,01350	24	24,000
	H_using a special team to spread a good word about the enterprise and its products	3,2500	,67566	24	24,000
Total	A_quality_control	4,4750	,96111	120	120,000
	B_Cost_control	4,2417	1,02076	120	120,000
	C_fast_consumer_needs_fulfillment	4,2417	1,02076	120	120,000
	D_improving_innovation_process	3,9750	1,28640	120	120,000
	E_choosing_enterprise_location	4,2417	1,02076	120	120,000
	F_marketing_via_exhibitions	3,8583	1,03952	120	120,000
	G_marketing_via_catalogues	3,5917	1,21956	120	120,000
	H_using a special team to spread a good word about the enterprise and its products	3,4667	,81924	120	120,000

Source; researcher work based on spss outputs

From the table above we can notice that the distribution of enterprise groups based on the mean revenue classes is the same as the previous two analyses. In this section the importance of the variables is measured based on the entrepreneurs use and evaluation of some of the choices given to them which consists in reality of small detailed elements that dichotomize the competitive advantage. In the term of mean responses and evaluation of importance of each factors we can notice that the first group "high decrease in mean revenue have evaluates the first five elements that forms that the competitive advantage (choice A; quality control, B; Cost control, C; fast consumer needs fulfillment, D; improving innovation process, E; choosing enterprise location) with the value 5 that represent according to our SPSS coding process "I strongly agree" whilst, they evaluated the three last elements F; marketing via exhibitions , G; marketing via catalogues, H; using a special team to spread a good word about the enterprise and its products with the value 3 which represent the choice "undecided".

In the high increase mean revenue group, all the responses were meanly 5= "I strongly agree", except for "improving innovation process"= **4,6250** (which is between I strongly agree 5 and I agree 4) and "marketing via catalogues"= **4,6250** and "using a special team to spread a

good word about the enterprise and its products" =**3,2500** (it is approximate undecided choice). This statistics means that not all the high revenue entrepreneurs uses or evaluate the those variables the same, less than half of the enterprise in high revenue group estimates that "improving innovation process" and "marketing via catalogues" does not worth the value 5 according to their personal experience and estimation, and nearly all the entrepreneurs included in that group agrees on the "using a special team to spread a good word about the enterprise and its products" as undecided. This means that good mouth to ear marketing method is not generally accepted among entrepreneurs as a a very strong competitive technique that give and enterprise an edge over the others.

Figure IV.5; the number of enterprises in Axis three on the basis of mean revenue growth
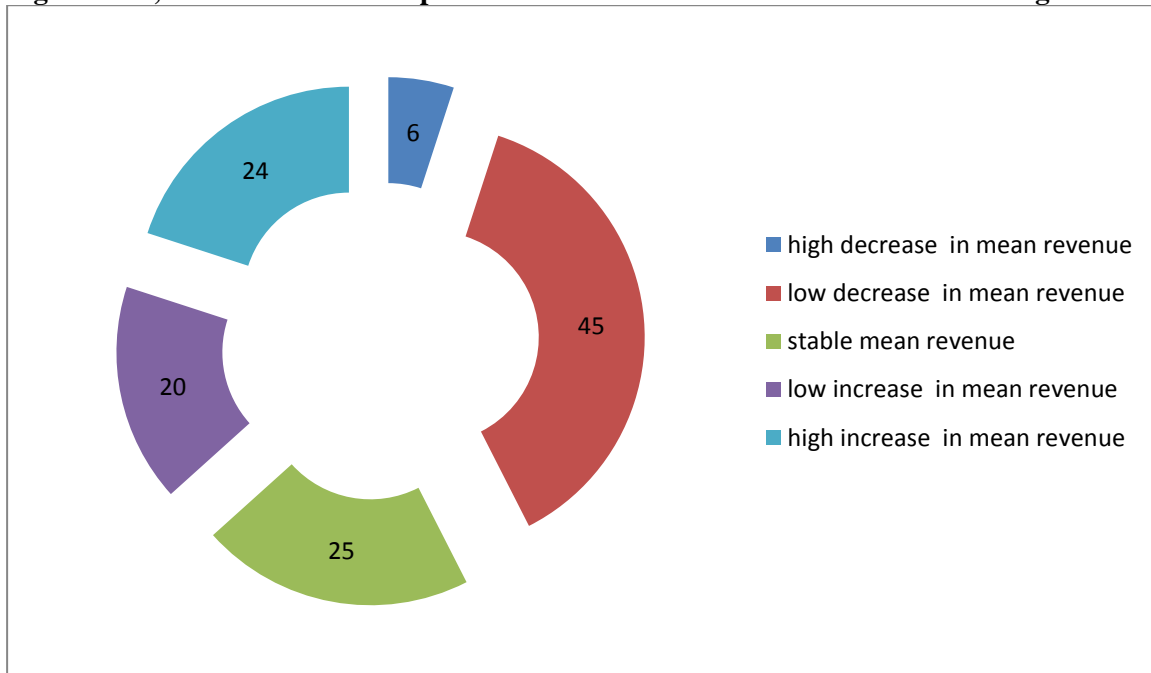
Source; research work based on spss outputs

The figure above is a representation of the classification process done by the discriminant analysis which classes the enterprises included in our sample into 5 different groups according to their mean revenue growth; low decrease mean revenue, high decrease mean revenue, stable revenue, low increase revenue and high increase revenue, in each of the previous analyses we have used a different axis as a basis of this differentiation however in each time the classification process gives the same number of enterprises in each group. that fact means that each group have approximately the same evaluation of the importance of the predictors which made the analysis function classifies them as one groups based on their choices.

Table IV.12: Tests of Equality of Group Means for axis Three

	Wilks' Lambda	F	df1	df2	Sig.
A_quality_control	,703	12,141	4	115	,000
B_Cost_control	,475	31,721	4	115	,000
C_fast_consumer_needs_fulfillment	,475	31,721	4	115	,000
D_improving_innovation_process	,640	16,162	4	115	,000
E_choosing_enterprise_location	,475	31,721	4	115	,000
F_marketing_via_exhibitions	,141	174,942	4	115	,000
G_marketing_via_catalogues	,361	50,850	4	115	,000
using a special team to spread a good word about the enterprise and its products	,752	9,495	4	115	,000

Source: researcher work based on spss outcomes

From the table above, we can notice that wilks-lambda of all the variables is statistically significant, **0.000** less than 0.05. This means that the quality of the discriminant analysis prediction is perfect to give significant results.

Table IV.13: Pooled Within-Groups Matrices (Inter-correlations) for axis three

		V1	V2	V3	V4	V5	V6	V7	V8
Correlation	V1	1,000	,729	,729	,324	,729	,463	,001	-,764
	V2	,729	1,000	1,000	,782	1,000	,396	,349	-,589
	V3	,729	1,000	1,000	,782	1,000	,396	,349	-,589
	V4	,324	,782	,782	1,000	,782	,225	,773	-,565
	V5	,729	1,000	1,000	,782	1,000	,396	,349	-,589
	V6	,463	,396	,396	,225	,396	1,000	,468	-,279
	C7	,001	,349	,349	,773	,349	,468	1,000	-,376
	V8	-,764	-,589	-,589	-,565	-,589	-,279	-,376	1,000

V1: quality control
V2: Cost control
V3: Fast consumer needs fulfillment
V4: improving innovation process
V5: choosing enterprise location
V6: marketing via exhibitions
V7: marketing via catalogues
V8: using a special team to spread a good word about the enterprise and its products

Source; research work based on spss outputs

Based on the correlation between variables that constitute the elements that form certain competitive advantages, we can notice six positive significant correlations and three perfect correlations equal to one, in the hypothesis or the condition for a perfect discriminant analysis it is required to have the minimum significant inter-correlation variables, in our case we have 9 from 29 internal correlation that have a significant positive correlation which is 31%, in the other hand we have 67% non-significant internal correlation which is considered statistically a good results for a good discriminant analysis.

We can notice from the inter-correlations, that V1 correlate with V2 with value of **0.729**, the interpretation of this value is that "quality control" is highly and positively correlated with "cost control" which is logical in the production management process, the quality can affect the

cost in a direct way, this is why some companies choose to locate their subsidies in countries with minimum wages and less taxes such as the eastern Asian countries, other companies choose to use the effect of the learning curve to minimize the costs but this advantage is exclusive characteristic of the old companies which have much more experience and perfection in the production department. Some other companies choose to use the scale economy to lower the costs of production, and whatever the way the companies should choose to precede, for entrepreneurs it a fact that quality affect the costs of the business.

There is a high positive correlation between "*quality control*" and "*fast consumer needs fulfillment*" =**0.729**, also high positive correlation between "*Cost control*" and "*improving innovation process*" = **0.782.** This means that cost control is highly related to the innovation process due to the interaction between the innovation process and the cost management and to deliver an innovative product the enterprise must control its costs to the reasonable level or else the product will be marginalized by the existing competition.

The correlation between "*quality control*" and "*choosing enterprise location*" is **0.729,** the correlation between "*choosing enterprise location*" and "*marketing via exhibitions*" is **0.782** and the correlation between "*improving innovation process*" and "*marketing via catalogues*" is **0.773**, this results can be interpreted that the entrepreneurs in included in our sample value or use those elements in an approximate similar matter, in other word they have given similar response choice in most of those cases, and in statistics correlation does not always mean causality.

We can notice that there is maximum positive correlation between variables V2 "*Cost control*" and V3 "*Fast consumer needs fulfillment*", between V2 *"Cost control"* and V5 "*choosing enterprise Location*", V3 "*Fast consumer needs fulfillment*" and V5 "*choosing enterprise location*" **= 1.00**, that the evaluation attributed for each of the previous variables is the same for each class.

Table IV.14: Canonical Discriminant Function Coefficients For axis three

	Function			
	1	2	3	4
A_quality_control	**2,945**	**3,491**	**2,262**	,573
B_Cost_control	-3,084	-5,018	-1,544	**1,218**
D_improving_innovation_process	1,686	2,703	1,880	-,622
F_marketing_via_exhibitions	-2,745	,998	-,602	-,158
H_Using a special team to spread a good word about the enterprise and its products	1,944	2,951	**2,006**	**1,515**
(Constant)	-2,946	-19,163	-15,676	-9,905

Unstandardized coefficients

Source: researcher work based on SPSS outputs

From the table above we can see that there are four group assigned by the discriminant analysis based on the prediction of group membership as follow;

D1= -2.946+2.945X1-3.084X2+1.686X3-2.745X4+1.944X5
D2= -19.163+3.491X1-5.018X2+2.703X3+0.998X4+2.951X5
D3= -15.676+2.262X1-1.544X2+1.880X3-0.602X4+2.006X5
D4= -9.905-0.573X1+1.218X2-0.622X3+-0.158X4-1.515X5

X1: quality control

X2: Cost control

X3: Improving innovation process

X4: marketing via exhibitions

X5: using a special team to spread a good word about the enterprise and its products

Figure IV.6; territorial map for competitive advantage factors discriminant analysis
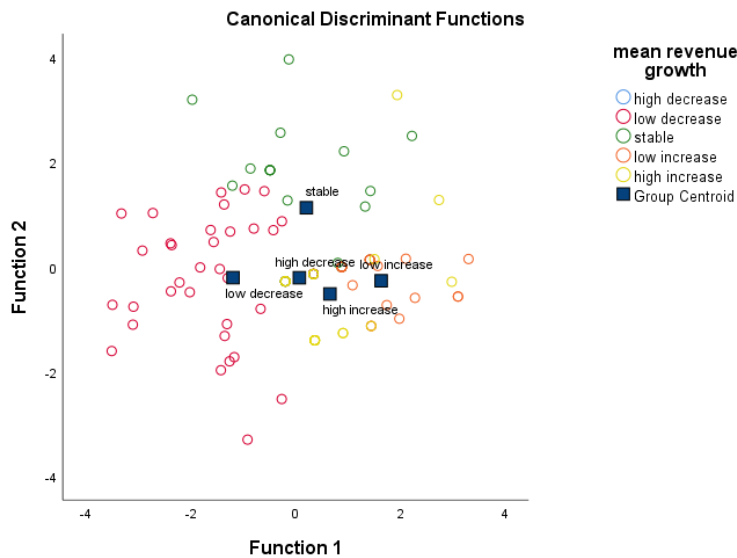
Source: researcher work based on SPSS outcomes

The figure above is a representation of the distribution of discriminant analysis of the third axis; the competitive advantage factors, in two axis dispersion figure, which locate each competitive groups in territorial map. We can notice that all the groups are close to each other, which mean that the statistical difference between the five classes is minimal.

We can notice that the discriminant functions in this axis includes less predictors than the initial variables, the missing variables are; *"Fast consumer needs fulfillment", "choosing enterprise location"* and *"marketing via catalogues".* The logical explanation is that those variables do not differentiate between the different classes significantly, in other words, the entrepreneurs in different competitive classes from high decrease in mean revenue to high increase in mean revenue, gave the same evaluation concerning those three variables, so the discriminant function which have the main goal of differentiating between groups according to different variables, did not find it statistically significant to discriminant between groups according to the previous variables.

Based on the first discriminant function that differentiates between the high decrease in mean revenue enterprises and the low decrease in mean revenue, the highest positive predictor is *"quality control"* equal **2,945**. The interpretation for this statistic is that the most significant variables that discriminate between the enterprises characterized by high decrease in mean revenue and the enterprises characterized by low decrease in mean revenue is the quality control element, and as the discriminant analysis search for the variables that maximally separate between groups, the quality control can be considered as the mean factor for an enterprise to change its position from the high decrease to the low decrease in mean revenue. Statistically speaking, if the quality control is increased by 1% there is a probability of 2,945% that the enterprise can progress from high decrease to the low decrease in mean revenue. However according to the discriminate function, there are two high negative variables *"Cost control"* =**-3.084** and *"marketing via exhibitions"* =**-2,745** which means that those variables can induce a lower mean revenue. An increase in cost control by 3% or marketing via exhibitions by 2.745% in the low decrease in mean revenue class will increase the probability of high decrease revenue group membership by 1% and any increase in those variables will decrease the mean revenue.

The second function that discriminate between the low decrease in mean revenue group and the stable mean revenue group is characterized by high positive value in *quality control* = **3,491,** which means that increasing the quality control by 1% will increase the probability of stable revenue group membership by 3.49%, also we can notice a high negative value in cost control = **-5,018 ,** this value means that a increasing cost control by 1% will decrease the probability of stable revenue group membership by 5.018% and the enterprise will likely be affiliated to the low decrease revenue group.

The third discriminant function that discriminate between the stable revenue group and the low increase in mean revenue group is characterized by two high positive variables; the first is *"quality control"* with the value **2,262** and the second variables is *"using a special team to spread a good word about the enterprise and its products"* with the value **2,006,** the statistical explanation for the the first value is that an increase by 1% in the quality control will increase the probability of revenue low increase group membership by 2.26% and an increase in spreading good word about the enterprise by 1% will increase the probability of revenue low increase group membership by 2.006%. According to the evaluation of entrepreneurs and managers included in our sample, for an enterprise to progress from stable revenue stage to a low increase in mean revenue stage, it is preferable to increase the quality control as it is the basis of the production process and the desire of any consumer to have a sustainable high quality product or a service, also the enterprise can use the traditional marketing technique by employing a special team that have for objective to spread a good word about the enterprise. This fact is most applicable in Algerian business climate as the sociological structure of the Algerian consumers is based on close daily relations which mean that the rumors and the information spread faster than those in the developed countries.

The last discriminant function that discriminates between two competitive groups; the low increase in mean revenue and the high increase in mean revenue group is characterized by a high positive value in both the following variables; *"Using a special team to spread a good word about the enterprise and its products"* = **1,515** and *"Cost Control"*= **1,218** , statistically speaking this mean that an increase in the first variable by 1% will increase the probability of high increase in revenue group membership by 1.515% and an increase in the second variable by 1% will increase the probability of high increase in revenue group membership by 1.218%. In other words, and according to the estimation of the entrepreneurs included in our sample, for an enterprise to progress from low increase revenue to high increase revenue stage is is highly preferable to use the mouth to ear marketing technique and the cost control as a complex competitive advantage. The cost control means that the enterprise has to lower the cost to the minimum without affecting the quality of the product or the service in anyway.

Those previous finding assert the fact that for enterprise to belong in each of the five competitive groups from the lowest revenue growth group to the highest revenue growth group, many complex variables can affect the outcome, in our research we have categorized those variables or predictors in three axes, entrepreneurial axe which include all the variables that affect the behavior, the engagement and the word of an entrepreneurs, competitive axis which include the variables that consists the different competitive advantages whether they are based on price, cost, quality or others, and the last axis is about the competitive advantage elements which is merely a decomposition of the competitive advantage and find which element is the most contributor to the revenue increase, and based on that analysis we were able to set a the exact value for each variable or predictor and its precise contribution to the classification equation.

4.2. Results Discussion

In relation to the previous statistical results, we will discuss the impact of those mathematical values in light of our research hypotheses, research main question and the possible prospects for those results.

4.2.1. Hypotheses Discussion

In this section we will discuss the results of this research and the impact of this study on the different research hypotheses,

4.2.1.1. First Hypothesis:
"For a successful investment environment, the goods and services market, the financial market as well as the labor market must reach maturity".

From the theoretical review we have concluded that increasing growth in goods and services and likewise in the financial and labor market is an good start to improve the investment environment and give the new and the existing investors a strong incentive to invest more capital and create new enterprises. However, the maturity of those three markets is not enough to advance the investment process in Algerian, and we will elaborate in that;

- The inflation rate in 2019 is 4.9% according to the competitiveness world report of 2019, which is considered an improvement compared to the last years rate, this is important because the financial capital of investment is and will always depend on that rate, the real value of investment and revenues is directly related to the inflation rate.
- The administrative requirements in Algeria is ranked 68th worldwide; and by exploring the details of the administrative requirement we can notice that the average cost of starting a business is 11.8 % of gross national income per capita with world ranking of 87th. This, make it difficult for new entrepreneurs with less personal financial contribution. The average time to start a business in Algeria is 17.5 days or 99th place worldwide concerning that factor,
- In the commercialization aspect; we found that the Algerian buyer sophistication is considered average with a score of 3.8 were the 1 is the worst and 7 is the best, with 55th place among the world economies, this can be a potential strength for the Algerian commercial system that requires improvement to make the necessary pressure on the entrepreneurs to deliver a better goods and services and eventually with sustainable improvement some the enterprises will meet the requirement of a international market completion and the government protection of national products will not be necessary as much as now.
- There are many other factors that need to be improved to incentivize the investors both locally and foreign ones, some of them are economic such as "Trademark applications and protection in which Algeria has ranked 105th world wide, also Interaction and diversity, macroeconomic stability, Venture capital availability and so many more economic aspects, in the political aspects, a rational investor is sensitive to the rigidity of the political system, and any new investor is a risk averse one, which make the judiciary and the decision making system in the high function of algeria is a very important matter and needs to be clarified to ensure a transparent way of making law and political decision so that any future information system can be valid and predict the efficiency of an enterprise. Also in the social aspect that makes certain pressure with cultural origins. In our questionnaire many entrepreneurs have affirmed that family, social and cultural pressure can highly encourage or discourage the decision of starting a new enterprise.

4.2.1.2. Second Hypothesis:

"The Algerian economy is in transition between factor driven economy and efficiency driven economy therefore the competitive advantage factors will be limited to four principal factors; quality/price rate, choice of profitability zones on the basis of business type, sustainable good reputation relates to the experience and marketing mix".

This hypothesis not entirely true as competitiveness theory consist of more complex indicators, such as the sociocultural factors, the microeconomic factors, the demand conditions, the market size and barriers…etc.

In light of our study results, we have included other socio-cultural variables alongside with other microeconomic factors, to test whether they have a significant impact on the competitive advantage or not, and the results suggests that all those factors have contributed either positively or negatively on building a robust competitive advantage in the existing macroeconomic conditions of Algeria. Also we have concluded in our theoretical research that competitive advantage factors in less developed countries have the same component in terms of porters diamond model, and by taking the textile industry in Egypt as a case study, we have seen that even with less developed market and skilled labor market, Egypt have been able to

maintain a sustainable competitive advantage in an economic conditions that are not far from the Algerian ones.

In the statistical research especially the competitive advantage factors analysis, we have seen that quality control, Cost control, fast consumer needs fulfillment, improving innovation process, choosing enterprise location, marketing via exhibitions, marketing via catalogues and using a special team to spread a good word about the enterprise and its products, are all significant predictors of the high increase revenue, which implies that all those factors have contributed greatly in the advancement of the competitive advantage in Algerian enterprises. Reviewing the previous statistics of the highly profitable entreprises from our questionnaire we can see that they have scored; 5 (very positive effect on the revenue increase) in quality control, Cost control, fast consumer needs fulfillment, choosing enterprise location and marketing via exhibitions, they have scored 4,6250 (less than the optimal positive effect) in improving innovation process, marketing via catalogues, and they have scored 3,2500 (average positive effect) in using a special team to spread a good word about the enterprise and its products.

The previous statistics provide evidence that the initial hypothesis that describes the requirements of the competitive advantage in an economy in transition between factor driven economy and efficiency driven economy particularly Algeria, is incomplete to explain the competitive advantage factors.

4.2.1.3. Third Hypothesis:
"By ranking and evaluating the new enterprises in competitive clusters using multiple factors we can raise the efficiency and the profitability of the enterprise and goods and services provided by this cluster".

This hypothesis is confirmed using the theoretical review in the competitive theory chapter, in which we have explored the benefits and the advantages of the cluster formation process using the porter diamond theory as a principal model in which he has evaluated the most ten efficient economies in the world during the 90's, and the conclusion was that the competitive cluster can contribute into the enterprise efficiency and by extend the quality of goods and services in a significant competitive prices. the theory has been tested in other countries in developing countries such as the case of china and Egypt. The case of Algeria is not different in that matter, and by gathering all enterprises that are active in the same industrial field or in the same type of business in one place it will be logistically efficient to produce in higher qualities, and by providing the related financial institutions nearby and the distribution enterprises in the same geographic zone it will make the competition less based on the price and more based on other competitive advantage factors. raking the enterprises according to their efficiency and quality of their outcomes will also increase the competitive advantage in that field by stimulating both the socioecological and cultural aspect of the managers by spending more time and resources trying to achieve better scores, and also stimulate the competitive mechanism process by creating the need for more advanced marketing methods and evolved demand conditions.

4.2.1.4. Fourth Hypothesis:
"In a less developed investment economy, the entrepreneurs must avoid businesses and industries that require high technological level".

This hypothesis is proven to be true in the short and medium time at least. The research in the validity of this hypothesis relied on two key elements;

The first element is The world competitiveness report of 2019 shows that Algeria has scored 84th in innovation capabilities with a score of 34 out of 10, in the details of this report we can find that Algeria has scored 4 out of 7 in intellectual property protection which is considered a medium score. 96% of mobile coverage, 57% of internet use among adult population, mean years of schooling among workforce is 8,7 years, Extent of staff training; 3.8/7, Skillset of graduates, 3.7/7, Digital skills among active population, 4/7, ease of finding skilled employees; 4.1/7, School life expectancy in the future is 14.3 years, Patent applications; 0.03 per million Algerian population, R&D expenditures is 0.5% of GDP, Research institutions prominence scored 0.04 out of 100.

Those statistics suggests, less technological experience and skilled workforce, howver according to the statistics the Algerian work force is showing promessing results compared to the last year and taking into account the future evolution. a positive evolution of the algerian workforce is what made the long time statistics in favor of technological entreprises, however in the short and the midterm the results are not strong enough to sugest a technological enterprise creation mechanism.

The government expenditure on research and development, the prominence of research institution and the patent protection and application are showing extremely low results, which make the technological investment in enterprises is far from ready in the short and the midterm.

The second element is the study conducted in the Algerian entrepreneurship analysis chapter, in which we have noticed that most of the SMEs that operate in all sectors of the national economy are Mainly concentrated in the Agriculture by (46.41% of SME/ Microenterprises), Industry (24.87%) and Services (20.77%). Public industrial SMEs provide more than 36% of the SME's workforce of the overall employees in this type of enterprises.
This statistic asserts the fact that agricultural enterprises were the major percentage of total small and medium enterprises, in Algeria, and the fact that the second business type by distribution is industry in 24% especially mining, assert the fact that, the Algerian enterprises in their current distribution do not have the highly complex demand that force them to innovate and provide more sophisticated products and services, the less developed industries have been operating in successful way without the need for further technological advancement, and according to the diamond model theory; only a high sophisticated buyer (demand condition) will drive the enterprise to evolve to the next level were they have to use new technologies in their procedures and the way of doing things.

The possibility of successful new technological enterprises according to the available data is not sufficient to reach a confident conclusion and will need to be furtherly examined, by studying the nature and the size for the technological demand, also the financial capabilities of the Algerian consumer, and most importantly, the ability to compete against the known international enterprises that have much more advanced experience curve and scale economies that make them very efficient in penetrating new markets.

4.2.1.5. Fifth Hypothesis:

"Based on a statistical model that measures all competitiveness and marketing variables, it is possible to calculate the probability of financial success of the enterprise and by extent the the competitive performance of the goods and services provided by this enterprise in highly significant confidence in the results".

According to the statistical analysis conducted in the last previous chapters, we have concluded that a discriminant analysis is a very reliable way to score, rank and measure the probability of success on a certain enterprise in its given present conditions and environment, An enterprise probability of success theoretically depends on many aspects including the macro and micro economic conditions, the sociological and cultural composition of the consumer society, the marketing mix architecture and many more elements, the principal factor in the success of this theory is the distinction between the controllable factors and the uncontrollable one, for example a new entrepreneurs must choose the enterprise location wisely to maximize its chance of success, also must have the necessary knowledge about the activity and the best finical agreements with the banks or the personal resources and partners that guarantee an easy financial situation in the first years of business, however, some of the incontrollable factors are in the way such as the absence of venture capital in Algeria alongside with less developed process of offering shares of a private corporation to the public in a new stock issuance or what is called IPO, this and other condition limits the ability of a new enterprise to thrive, most of those uncontrollable variables have been explained in detail in the agrarian investment climate section.

By applying the statistical model to Algerian case study we have confirmed the this hypothesis, and we have drawn some results concerning the Algerian small and medium enterprises working in different fields and some of those results are;

- We have divided the research for competitiveness improvement to three axis; the first axes is concerned with the entrepreneurial behavior analysis among young and more experienced Algerian entrepreneurs to find the key component in this behavior that makes an enterprise financial profitable. The next analysis is concerned with competitive advantage according to Algerian environment and entrepreneurs, and the last analysis is the competitive factors analysis, in which we illustrate the influence of each component and competitive mix on the global growth rate of the enterprise.

The discriminant functions are ranked according to their discriminatory function from the first discriminant function D1 that differ between the group with high decrease in profits, to the last function D4 that discriminant between the two groups; high increase group and low increase in profits group.

Entrepreneurial behavior;

D1= -8.999+ 0.172X1-0.538X2+0.201X3+0.822X4+0.204X5+0.204X6+1.131X7
D2= +3,966- 0,746X1-0.138X2+0.715X3+0.026X4 -0.514X5-0.514X6 +1.139X7
D3= +3,246+ 0. 840X1-0.584X2+0.423X3+0.361X4-2.294X5-2.294X6 - 0.031X7
D4= +2,709+ 0. 330X1-0.318X2+0.444X3+0.822X4-2.076X5-0.2076X6+0.195X7

X1: evaluation of personal financial contribution effect
X2: evaluation of family support
X3: evaluation of religion effect on business procedures
X4: evaluation of social culture and tradition on business
X5: evaluation of specialized or academic studies effect
X6: evaluation of effect of communication with everyone involved

X7: instable income effect can be positive or negative

Competitive advantage analysis

D1= 0.476+ 1.486X1-0.338X2-2.109X3+0.317X4-0.270X5-0.889X6+1.968X7
D2= -8.439-0.276X1+0.563X2-0.074X+3,333X4+1.490X5+0.297X6-0.516X7
D3= 1,821+0.055X1-0.357X2+0.295X3-1.309X4+0.435X5+1.888X6-1.338X7
D4= -4,125-0.631X1+0.181X2+0.925X3+0.946X4-1.751X5+0.904X6-0.746X7

X1: using quality as entry barrier
X2: using SWOT analysis as entry barriers
X3: using customer relationship management CRM as entry barrier
X4: collecting information about competition regularly
X5: seeking new markets that are hard for competitors
X6: introducing new products with different aspects than competitors
X7: seeking cost leadership advantage

Competitive Advantage Factors Analysis

D1= -2.946+2.945X1-3.084X2+1.686X3-2.745X4+1.944X5
D2= -19.163+3.491X1-5.018X2+2.703X3+0.998X4+2.951X5
D3= -15.676+2.262X1-1.544X2+1.880X3-0.602X4+2.006X5
D4= -9.905-0.573X1+1.218X2-0.622X3+-0.158X4-1.515X5

X1: quality control
X2: Cost control
X3: Improving innovation process
X4: marketing via exhibitions
X5: using a special team to spread a good word about the enterprise and its products

By that we have concluded hypothesizes confirmation process, by illustrating the results and the discussion of the five initial hypothesizes.

4.2.2. Research Question Discussion

"How to rank organizes and manages enterprises in groups using the discriminant analysis to increase competitiveness".

Before we discuss this question, we have to note that many competitive theories, starting from competitive advantage of nations in 1990 by porter to "Industry Clusters and Regional Economic Performance: A Study across U.S. Metropolitan Statistical Areas" in 2018 by Timothy F. Slaper Timothy, we can conclude a certain advantages such as:

- Clusters are geographic concentrations of interconnected companies or institutions that manufacture products or deliver services to a particular field or industry. Clusters typically include companies in the same industry or technology area that share infrastructure, suppliers, and distribution networks. Supporting firms that provide components, support services, and raw materials come together with likeminded firms in related industries to develop joint solutions and combine resources to take advantage of market opportunities. These are groups of related businesses and organizations—sometimes direct competitors, but more often operating in a complementary manner. They may comprise more than just one industry classification, and a true cluster is more than just a supplier producer-buyer model.

-An economic cluster, or several clusters, serves as the driving force in most regional economies. Examples include Detroit's auto industry concentration, computer chip production in California's Silicon Valley, London's financial sector, the Napa Valley's wine production, and Hollywood's movie production industry.

The cluster industry strategy can teach communities to analyze their existing business and industrial bases and build their economic development on those strengths. From the identified clusters in an area, the next step is to develop a marketing plan for industry.

-By developing a massive database of companies, county by county, previous research in the field has statistically grouped businesses together in clusters. A strong cluster will include the suppliers of raw materials and the distributors, as well as the primary producers. But it will also include specialized services in finance, marketing, packaging, education, and more, including specialized trade associations. In general, the broader the base of related businesses, the better for the cluster, for that often reflects the specialization that comes with concentrated resources.

-for the banks and the government this mechanism will enhance the chances of success in the first year for new entrepreneurs by delivering a products with high value and have the ability to pay their loans and credits which will be profitable for the financial and insurance institutions as well such as ANSEJ, CNAC and other investment supporting agencies. Eventually the outcome will boost the national economy by creating a new sustainable entrepreneurship mechanism that delivers its objective in the macroeconomic level.

In our statistical analysis we have applied a simplified version of this analysis that ranks and organize the enterprises using primary data, despite, the lack of sufficient data for our analysis, the process has proven that it work, the discriminant analysis can be used in a macroeconomic level to divide the existing enterprises in groups according to their competitiveness or profitability rate from the less profitable business to the highly profitable one and analysis the strength and the weakness of every company in the cluster. According to our study, that included three axes, we were able to score the enterprises and arrange each one in its natural competitive level in order to to increase competitiveness among groups and each high level enterprise in its group can evolve to the next group and compete with much more experienced enterprises. Also, this process can detect an enterprise if it have less chance of

success and direct it toward more profitable business type, or change its SWOT analysis in favor of this business type.

CONCLUSION

Competitiveness in small and medium enterprises is one of the major market drivers in developing countries specific to their socio-cultural characteristics, which make it a large research field for academics and practitioners, making this point does not refer to the newness of the subject in itself, as the competitiveness in research field has appeared a long time ago and been developing since the new rise of industrial branches. However, in developing countries such as Algeria, the entrepreneurship rarely refers or studies the factors of success or failure of small and medium enterprises in clusters or in grouping structure based on similarities and differences, for that matter as an academic field of research, the subject is developing specifically for the sociocultural characteristics of those countries.

The entrepreneurship is generally understood in the context of medium and large enterprises, although as shown in the relevant sections, Algerian fabric is almost totally composed from small enterprises especially microenterprises operating in the trade and crafts business; therefore growing this area has become an obligation to promote the national industry, starting from the very small brick of economy.

In our research we have demonstrated the utility of the discriminant analysis in the research field and specifically in the competitive analysis of the multiple different factors, the discriminant analysis is a way to find a statistical relation between the internal variable which is the profits acquired during the past years and the external variables which include the previous mentioned and explained variables gathered in groups by their similarity effects. In this context we have developed many competitive categories based on the revenue growth rate as a dependent variables and many other variables as independent variables, and we have categorized the enterprises in our data set based on equations to multiple classes that can be used to study the similarities in each group and find the drivers of the high competitiveness and also promote the failing enterprises by defining the low score variables and try to encourage the entrepreneurs to address the internal and the external problems in the struggling enterprise.

❖ **The Results**
While we are investigating the main problem, we have concluded many results some of them were found based on the theoretical study, others were concluded based on the statistical one.

a. **The theoretical results**
- From the theoretical results in our study is; that the competitiveness and the competitive analysis is one of the most common branches of economic analysis, which makes it partially a field with many potentials to develop and uncover more of its dynamics especially taking into account the different characteristics between the developed and developing countries.
- Porters theories were limited to the most industrial economies between 1980 and 1990, which makes the diamond model analysis less susceptible to be fruitful in developing and under developed countries with simpler economic framework, due to many reasons in which the most important one is the sociocultural differences.
- The competitive performance for small and medium enterprises in Algeria can be enhanced using different factors; such as; choice of location, price and

service quality, chalandise zone, the number of competitors and complementary business…etc.

- The Algerian investment climate is characterized by slow mechanisms and non-fluid procedures which make the new entrepreneur work very hard to achieve a financial stable situation.

- The results from the annual competitive reports shows that algeria has many natural and economic potential that have not been yet exploited, such as the less skilled workers due to the lack of education and training, also with 14 years mean of schooling years in Algeria, the workforce is susceptible to fail in high of international competitions which is highly skilled.

- Absence of transparency in financial transaction is decreasing the investment rate in Algeria, especially as the new investors are strongly risk-averse businessmen.

b. The Statistical Results

We have divided our statistical research to three types of business due to the noticeable difference in characteristics which in turn affect the competitive performance using different mix of factors for each type (entrepreneurship factors, competitive factors, and competitiveness detailed analysis).

1. Entrepreneurial Analysis

- The first equation discriminate between the the low decrease in mean revenue and the high decrease in mean revenue groups, from that equation we can notice that instable income effect is the most significant predictor of the entrepreneurship behavior with a value of 1.131 which means that most new entrepreneurs are mostly encouraged by the availability of relative revenue depending on their own work,

- In the second function that discriminate between the low decrease and stable mean revenue; we can notice that the "evaluation of specialized or academic studies effect" -1,125 and "instable income effect can be positive or negative" 1,139 are the most significant predictor factors that differentiate between the low decrease group and stable revenue group, this statistic reflect the fact that academic studies are a necessary factors to guarantee a stable revenue especially with the continuous economic and environmental change that affect the enterprise.

- The third function that describes the transition from low increase revenue to high increase revenue is depending on communication skills as a main predictor of this transition, the communication skills according to the discriminant function is highly related to high increase revenue, alongside with highly positive significant value of "evaluation of specialized or academic studies effect" 0.822, which have a great impact on enterprise formation and management and especially its impact on the mean revenue growth. On the other hand the most negative predictor in this discriminant function is "communication with everyone involved" -2.076, this assert the fact that the skills to lead are directly related to the skills of communication in which the enterprise can promote its competitive status.

2. the Statistical Results from the competitive advantage analysis

- From the first discriminant function which discriminant between high decrease in mean revenue group and low decrease mean revenue group according to the competitive advantage axis, we notice that the variables "seeking cost leadership advantage" with the value of 1,968 and "using quality as entry barrier" with the value of 1,486 are the most significant predictors in this first function, this means that the groups that have low decrease revenue and high decrease revenue are significantly different in those particular variables.

- In the second function which discriminant between low decrease in mean revenue and stable mean revenue we can notice that "seeking new markets that are hard for competitors"
With the value 1,490 is the most significant predictor, this means that for an enterprise to progress from low decrease in mean revenue to a stable revenue growth, it is required to seek new markets that can't be accessed by competitors.
- In the last discriminant function we notice that *"collecting information about competition regularly"* is the most significant predictor with the value of **1,946** this means that in order for an enterprise to move from the low increase revenue stage to the high increase revenue growth stage, it needs to collect information about other competitors in order to develop a special advantage that will give it an edge in the existing markets.

3. the Statistical Results for competitive factors analysis

- Based on the first discriminant function that differentiates between the high decrease in mean revenue enterprises and the low decrease in mean revenue, the highest positive predictor is "quality control" equal 2,945. The interpretation for this statistic value is that the most significant variables that discriminate between the enterprises characterized by high decrease in mean revenue and the enterprises characterized by low decrease in mean revenue is the quality control element.

- The second function that discriminate between the low decrease in mean revenue group and the stable mean revenue group is characterized by high positive value in quality control = 3,491, which means that increasing the quality control by 1% will increase the probability of stable revenue group membership by 3.49%, also we can notice a high negative value in cost control = -5,018 , this value means that a increasing cost control by 1% will decrease the probability of stable revenue group membership by 5.018% and the enterprise will likely be affiliated to the low decrease revenue group.

- The third discriminant function that discriminate between the stable revenue group and the low increase in mean revenue group is characterized by two high positive variables; the first is "quality control" with the value 2,262 and the second variables is "using a special team to spread a good word about the enterprise and its products" with the value 2,006, the statistical explanation for the the first value is that an increase by 1% in the quality control will increase the probability of revenue low increase group membership by 2.26% and an increase in spreading good word about the enterprise by 1% will increase the probability of revenue low increase group membership by 2.006%.

- The last discriminant function that discriminates between two competitive groups; the low increase in mean revenue and the high increase in mean revenue group is characterized by a high positive value in both the following variables; "Using a special team to spread a good word about the enterprise and its products" = 1,515 and "Cost Control"= 1,218 , statistically speaking this mean that an increase in the first variable by 1% will increase the probability of high increase in revenue group membership by 1.515% and an increase in the second variable by 1% will increase the probability of high increase in revenue group membership by 1.218%.

❖ **Hypothesis Tests**

1) "For a successful investment environment, the goods and services market, the financial market as well as the labor market must reach maturity".

We have confirmed the first hypothesis From the theoretical review in which we have concluded that reaching a maturity in goods and services and likewise in the financial and labor market is an excellent starting to improve the investment environment and give the new and the existing investors a strong incentive to invest more capital and create new enterprises. However, the maturity of those three markets is not enough to advance the investment process in Algerian.

2) "The Algerian economy is in transition between factor driven economy and efficiency driven economy therefore the competitive advantage factors will be limited to four principal factors; quality/price rate, choice of profitability zones on the basis of business type, sustainable good reputation relates to the experience and marketing mix".

This hypothesis not entirely true as competitiveness theory consist of more complex indicators, such as the sociocultural factors, the microeconomic factors, the demand conditions, the market size and barriers…etc.

3) "By ranking and evaluating the new enterprises in competitive clusters using multiple factors we can raise the efficiency and the profitability of the enterprise and goods and services provided by this cluster".

This hypothesis is confirmed using the data gathered in the theoretical study conducted in the competitive theory chapter, in which we have explored the benefits and the advantages of the cluster formation process using the porter diamond theory as a principal model in which he has evaluated the most ten efficient economies in the world during the 90's, and the conclusion was that the competitive cluster can contribute into the enterprise efficiency and by extend the quality of goods and services in a significant competitive prices. The theory has been tested in other countries in developing countries such as the case of china and Egypt.

4) "In a less developed investment economy, the entrepreneurs must avoid businesses and industries that require high technological level".

This hypothesis is proven to be true in the short and medium time at least. The research in the validity of this hypothesis relied on two key elements;

The first element is The world competitiveness report of 2019 shows that Algeria has scored 84th in innovation capabilities with a score of 34 out of 10, in the details of this report we can find that Algeria has scored 4 out of 7 in intellectual property protection which is considered a medium score. 96% of mobile coverage, 57% of internet use among adult population, mean years of schooling among workforce is 8,7 years, Extent of staff training; 3.8/7, Skillset of graduates, 3.7/7, Digital skills among active population, 4/7, ease of finding skilled employees; 4.1/7, School life expectancy in the future is 14.3 years, Patent applications; 0.03 per million Algerian population, R&D expenditures is 0.5% of GDP, Research institutions prominence scored 0.04 out of 100.

5) "Based on a statistical model that measures all competitiveness and marketing variables, it is possible to calculate the probability of financial success of the enterprise and by extent the the competitive performance of the goods and services provided by this enterprise in highly significant confidence in the results".

According to the statistical analysis conducted in the last previous chapters, we have concluded that a discriminant analysis is a very reliable way to score, rank and measure the probability of success on a certain enterprises in its given present conditions and environment, An enterprise probability of success theoretically depends on many aspects including the macro and micro economic conditions, the sociological and cultural composition of the consumer society, the marketing mix architecture and many more elements, the principal factor in the success of this theory is the distinction between the controllable factors and the uncontrollable one, for example a new entrepreneurs must choose the enterprise location wisely to maximize its chance of success.

❖ **Recommendation**
Relying on the study results we were able to deduce some recommendation for the new and existing small and medium enterprises and other recommendation meant for the government investment agencies and any market regulation institutions that help to shape the market to maximum efficiency in the competitive field, we will mention some of those recommendations in the following points:

a. **Government Regulation Agencies**
What is meant by government regulation agencies in our case Algeria is the ministry of commerce and its regional and local branches. According to the study, a maximum efficiency were found in the small and medium enterprises located near or close to competitors or complementary businesses, and a positive correlation was found between the number of competitors nearby and the success of the small and medium enterprises and its ability to compete and evolve, the same positive correlation was found between business success and the number of complementary business. This fact can be exploited to an extent to maximize the efficiency of the small and medium enterprises by assigning a given type of business to a given location so it can create a competitive cluster over time that have the ability to evolve and grow naturally to a larger company. If the government with the help

of its local institutions can reshape and reorganize the cities plan in a way that group existing new businesses with similar type of business regardless if they are competitors or complementary business as long as they operate in the same business type. If they can reallocate them in a small geographic area it will enhance the individual competitiveness of each business.

b. New Entrepreneurs

My recommendation for the new entrepreneurs is to set the growing and the evolution of the business as their top goals and priorities, because during our research we notices a lack of will to grow, even those who have the financial and the structural abilities to grow and evolve to the next step abstain from enlarging their business, this reality in itself needs more studies to determine the real causes for this phenomena. The other recommendation for entrepreneurs is to increase their scores in each competitive factor to sustain their growth rate even in a highly competitive market.

❖ Study Limitations and Future Complementary Studies

During our research we found many difficulties to comprise all the study aspects as we found many difficulties gathering all the necessary data, this fact is due to the fact that people with certain local cultural background have many doubts about the use of those information so the logical action for them is to abstain from giving any honest answers, for that reason we have some doubts about the signification of the results in light of little honest answers as we have used direct questions and answers in our analysis, however, we have followed the scientific way to prove or test our hypotheses, so the results were accurate to a certain extent.

To assert our findings and the utility of our algorithm in the local market we recommend future trials and field test using our method or a developed method based on discriminant analysis.

As our data analysis were solely relaying on human subjects answers, and as those answer can be subject to changes and alteration due to many reasons, we recommend also that future analysis on the subject rely on more accurate statistics and national reports on the subject.

From the future studies we suggest a subject that benefit the competitiveness field in Algerian market; for instance the effect of socio cultural characteristics in Algeria on the entrepreneurial behavior, also the drivers of competitiveness in a less stable economies.

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APPENDIXES

الطالب: عدنان حسام

استبيان حول كيفية تحسين الميزة التنافسية باستعمال التحليل التمييزي – دراسة حالة المقولاتية في الجزائر .

السلام عليكم و رحمة الله و بركاته...، يسعدنا الأخ(ت) المحترم(ة)... ، أن تشاركوا معنا في هذا الاستبيان الذي يهدف لمعرفة سبل تحسين الميزة التنافسية للمؤسسات الصغيرة والمتوسطة، وهذا من خلال الإجابة على أسئلة الاستمارة المرفقة، مع العلم بأن إجابتكم ستندرج في إطار رسالة دكتوراه، تخصص تسويق، تحت عنوان" تحسين الميزة التنافسية باستعمال التحليل التمييزي – دراسة حالة المقولاتية في الجزائر "، تحت إشراف الأستاذ لعلاوي عمر، مع العلم والتأكيد بأن هذه المعلومات لن تستعمل إلا لأغراض البحث العلمي وفي إطار هذه الدراسة. شاكرين لكم تعاونكم تقبلوا منا فائق أسمى عبارات الاحترام و التقدير.

ملاحظة : يتم اختيار الخانة المناسبة بوضع علامة √ .

أولا: معلومات تخص مؤسستك

اسم المؤسسة	
نشاط المؤسسة	

❖ **ما هو قطاع النشاط الذي تنتمي إليه المؤسسة؟**

☐ خدمات للعائلات	☐ الصناعة الغذائية	☐ الفلاحة والصيد البحري
☐ مؤسسات مالية	☐ صناعة النسيج	☐ المياه والطاقة
☐ أعمال عقارية	☐ صناعة الجلد	☐ المحروقات
☐ خدمات للمرافق الجماعية	☐ صناعة الخشب والفلين والورق	☐ خدمات والأشغال البترولية
	☐ صناعة مختلفة	☐ المناجم والمحاجر
	☐ النقل والمواصلات	☐ الحديد والصلب
	☐ التجارة	☐ مواد البناء
	☐ الفندقة والإطعام	☐ البناء والأشغال العمومية
	☐ خدمات للمؤسسات	☐ كيمياء – مطاط- بلاستيك

❖ **عدد العمال**

☐ بين 10 و 49

1

☐ بين 50 و99

☐ بين 100 و199

☐ بين 200 و 249

❖ **هل مؤسستكم ؟**

☐ مؤسسة عمومية

☐ مؤسسة خاصة

❖ **ما هو تاريخ بداية نشاطكم ؟**

☐ اقل من 03سنوات

☐ بين03 إلى 05 سنوات

☐ اكثر من 05 سنوات

❖ **من هو القائم بادارة المؤسسة ؟**

☐ مالك المؤسسة

☐ مدير اجير

❖ **ما هو متوسط الزيادة في رقم الأعمال ؟**

☐ اخفاض قوي   ☐ انخفاض ضعيف   ☐ستقرار   ☐ ارتفاع ضعيف   ☐ ارتفاع قوي

❖ **ما هو وضع المنافسة على السوق**

☐ قوية   ☐ فوق الوسط   ☐ متوسط   ☐ دون الوسط   ☐ ضعيفة

❖ **ما هو أثر المنافسة على المؤسسة**

☐ لا يوجد تأثير   ☐ سلبي   ☐ ايجابي

❖ **وضعية المؤسسة في السوق**

☐ حصة سوقية ضعيفة   ☐ حصة سوقية متوسطة   ☐ حصة سوقية قوية

ثانيا: تقييم التوجه المقاولاتي لدى اصحاب المؤسسات:

محفز جدا	محفز	محفز نوعا ما	عائق	فقرات الاستبيان
				❖ الإعفاء من دفع الضرائب والأقساط الأولية
				❖ الحصول على التمويل من طرف وكالات الدعم والمرافقة
				❖ الاستفادة من معدل فائدة مخفض على القروض الممنوحة
				❖ المساهمة الشخصية الكبيرة في راس المال
				❖ تأثير المحيط العائلي
				❖ تأثير الدين
				❖ تأثير العادات والتقاليد

2

	غير موافق جدا	غير موافق	محايد	موافق	موافق جدا	الفقرات
						❖ مساهمة التخصص التكويني او الاكاديمي
						❖ مساهمة العمل لدى مؤسسات اخرى
						❖ القدرة على التواصل
						❖ القدرة على القيادة
						❖ القدرة على المخاطرة وتقبل الفشل
						❖ الثقة بالنفس
						❖ الحصول على دخل غير ثابت من خلال هذا النشاط
						❖ القدرة على التواصل

ثالثا: الميزة التنافسية في المؤسسة

هو	غير موافق جدا	غير موافق	محايد	موافق	موافق جدا	الفقرات	ما
						1-تعمل المؤسسة على إعاقة دخول منافسين جدد من خلال التركيز على الجودة .	
						2- تقوم بدراسة نقاط القوة والضعف لدى المنافسين لتحقيق الفرص والتفوق	
						3- تعمق المؤسسة علاقتها مع الزبائن للحد من دخول منافسين جدد	
						4- تجمع المؤسسة معلومات دورية عن المنافسين .	
						5-تسعى المؤسسة للوصول لأسواق جديدة يصعب الوصول إليها من قبل المنافسين .	
						6-تعمل المؤسسة على تقديم منتجات بمزايا جديدة وتحسينات مختلفة عن المنافسين .	
						7- تعمل المؤسسة على تخفيض التكاليف للمنتجات و العمليات .	
						8- تسعى المؤسسة للحصول على مزايا سعرية من الموردين لتخفيض التكاليف.	
						9- تعمل المؤسسة على زيادة المبيعات .	
						10- تعمل المؤسسة على تحسين جودة المنتجات .	
						11- تعمل المؤسسة على زيادة الحصة السوقية من خلال فتح اسواق جديدة وتعزيز الاسواق المحلية.	

تقييمكم حسب الأهمية النسبية في الميزة التنافسية للعناصر التالية:

					أ– التحكم في الجودة
					ب– التحكم في التكاليف
					ت– سرعة الاستجابة لاحتياجات الزبائن
					ث– الابداع و الابتكار
					ج– اختيار مقر المؤسسة
					ح– التسويق عن طريق المعارض
					خ– التسويق عن طريق توزيع كاتالوجات
					د– التسويق عن طريق تكليف اشخاص بالاشهار (اسلوب من الفم الى الاذن)

high school of business - kolea

Student: **adnane houssem**

This is questionnaire is part of a research in doctorate in science thesis by the title: improving competitive performance using discriminant analysis – the case of entrepreneurship in Algeria.

Note: please put a mark on the appropriate answer.

First: **information about the enterprise**:

Name of the enterprise	
Enterprise activity	

What is the enterprise activity field?

family services ☐	food industry ☐	Fishing and agriculture ☐
financial business ☐	textile ☐	Water and energy ☐
real–estate ☐	leather ☐	Oil industry ☐
social services ☐	wood industry ☐	Services in oil industry ☐
	different industries ☐	mines ☐
	transportation ☐	steel industry ☐
	treading and distribution ☐	construction materials ☐
	hotels and catering ☐	construction ☐
	complementary services ☐	plastic and chemistry ☐

Number of workers

from 10 to 49 ☐

50 – 99 ☐

100 – 199 ☐

200 – 249 ☐

❖ **Type of enterprise**

      public ☐

      private ☐

❖ **Experience in the field**

      less than 3 years ☐

      03 – 05 ☐

      more than 5 years ☐

❖ **Type of ownership**

      ☐ owner is the manager

      ☐ independent manager

❖ **Mean revenue growth**

high decrease ☐   low decrease ☐   stable ☐   low increase ☐   high increase ☐

❖ **competition evaluation in the market**

strong ☐   above medium ☐   medium ☐   below medium ☐   low ☐

❖ **effect of competition**

      positive ☐   negative ☐   no effect ☐

❖ **market share evaluation**

      big market share ☐   medium Market share ☐   small market share ☐

entrepreneurship behavioral motivation

Strong motivation	motivation	low motivation	obstacle	Express your personal point of view toward:
				tax exoneration ❖
				getting financial resources from different agencies ❖
				low interest rates ❖
				owning a big part of the initial capital ❖
				family support ❖
				religion effect ❖

					local culture and traditions ❖
					academic studies or professional training ❖
					previous experience ❖
					communication skills ❖
					leadership skills ❖
					adventure spirit and risk tendency behavior ❖
					self confidence ❖
					irregular income ❖
					coworkers' relations ❖

Market conditions

Highly disagree	disagree	neutral	agree	Highly agree	Express your personal point of view toward:
					Using quality as entry barrier
					Studying competitors' strengths and weaknesses
					Good customer relations as entry barrier
					Periodic information about competitors
					Accessing new markets or market segments
					New and different product than the competitors
					Low production and operation costs
					Low cost deals with suppliers
					Increasing sales
					Increasing product quality
					Increasing market share or preserve the existing one

Importance of certain competitive advantages

					Quality control
					Cost control
					Speed in fulfilling customer needs
					innovation
					Enterprise geographic location
					Marketing using exhibitions
					Marketing by distribution flyers
					Mouth to ear marketing

نهدف من خلال هذه الدراسة الى الوقوف على الاسباب العملية وراء نقص الكفاءة التنافسية للمؤسسات الصغيرة و المتوسطة و التي تتمثل اساسا في عدم القدرة على خلق قيمة مضافة تضاهي او تنافس المنتوج الاجنبي وتصحيح الاستراتيجية التنافسية بناء على المعلومات التي تم جمعها من طرف مصادر رسمية منها الاحصائيات و المقابلات السابقة مع مسؤولين على القطاعات الاقتصادية المعنية بالمؤسسات الصغيرة و المتوسطة و كذلك اراء المستثمرين الجدد حول الموضوع و بناء على هذا تم اقتراح ادوات تحليلية في كلا الجانبين التسييري و التنافسي ملائمة لمناخ الاعمال الجزائري، و كذا تعديل الاستراتيجية الحكومية للاستثمار في هذا النوع من المؤسسات بتنظيم السوق بطريقة تسمح بمراقبته و تعديله بمرونة. اعتمدنا في هذه الدراسة على تحليل النتائج باستخدام التحليل التمييزي نظرا لما يوفره من قدرة على التجميع و التصنيف وفق خصائص معينة مسبقا من طرف الباحث. اما في ما يخص مصادر البيانات اعتمدنا على المعلومات الرسمية و الاحصائيات وكذا استبيان مقدم لأصحاب المؤسسات الصغيرة و المتوسطة. تم التوصل الى مجموعة من المحددات التي تعتبر المفتاح الاساسي لنجاح و نمو و تطور طبيعي للمؤسسات الصغيرة و المتوسطة الجزائرية بناء على نموذج مقترح في الدراسة. كما تم التوصل الى ضرورة التفكير بجدية في تنظيم المدن وفق نظام المجمعات العنقودية اين نجد كل المؤسسات المرتبطة بنشاط مجمعة جغرافيا في مكان واحد لضمان فعالية تنافسية أكبر ما ينعكس ايجابا على السياسة الاستثمارية الكلية في الجزائر.

We aim through this study to identify the principal reasons behind the lack of competitiveness of small and medium enterprises, which can be noticed by comparison with the foreign companies and their products, that lack of competitiveness can be corrected using a pertinent competitive strategy based on the information collected by official sources, including statistics and Previous interviews with managers in the economic sector, as well as the opinions of the new Algerian investors, and based on this, a competitive analysis is conducted both on the managerial and competitive aspects taking into account the Algerian business climate, also propose a modification of the government SME's strategy by organizing The market in a way that allows it to be monitored and adjusted flexibly. In this study, we have used the discriminant analysis as a tool for organizing ranking and classifier the existing and the new enterprises based on their competitiveness based on a chosen competitive factors that are adapted to the Algerian entrepreneurship case, also, increase competitivity by organizing the similar and complementary activities in a small geographic location to increase their competitiveness.