



**CLDP**  
COMMERCIAL LAW DEVELOPMENT PROGRAM



**I.H.E.C.**



**Rensselaer**  
LALLY SCHOOL  
OF MANAGEMENT & TECHNOLOGY

# ***ENTREPRENEURSHIP AND INNOVATION IN THE MAGHREB***

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PREFACE

by

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General Counsel, U. S. Department of Commerce

FOREWORD

by

**Robert F. Godec**

Former U. S. Ambassador to Tunisia, 2006 - 2009

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U.S.-Middle East Partnership Initiative



The opinions, findings and conclusions stated therein are those of the author[s] and do not necessarily reflect those of the United States Department of State.

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# PREFACE

By CAMERON F. KERRY

*General Counsel, U.S. Department of Commerce*

The United States and the Muslim world have a common interest in the fostering of entrepreneurship and innovation because both are prime sources of sustainable job creation, a worldwide priority. In his June 2009 speech given in Cairo, President Obama said

*“I will host a Summit on Entrepreneurship this year to identify how we can deepen ties between business leaders, foundations and social entrepreneurs in the United States and Muslim communities around the world.*

*On science and technology, we will launch a new fund to support technological development in Muslim-majority countries, and to help transfer ideas to the marketplace so they can create jobs”.*

This book is the result of the ties between US and Muslim counterparts that President Obama advocated: Written by a joint team of US and Tunisian professors, it will benefit entrepreneurs and innovators in the Maghreb and beyond. This book is the culmination of a five-year partnership between US and Tunisian business schools and engineering schools. This partnership, focused on the management skills needed for successful technology-based entrepreneurship, has yielded numerous benefits aside from this book. For instance, professors from both countries have jointly developed courses taught, in the US by Tunisian professors, and, in Tunisia, by US professors. Entrepreneurs from both countries have benefited from this pooling of expertise.

This project was designed and conducted by the US Department of Commerce’s Commercial Law Development Program (CLDP) and funded by the US Department of State. I am proud that CLDP is part of the Office of the General Counsel of the US Department of Commerce. CLDP’s mandate is to help develop a legal and judicial environment conducive to economic growth through investment and trade.

A key component of CLDP’s mandate is the promotion and enforcement of intellectual property rights (IPR). To this end, CLDP has adopted, for the last 10 years, a twofold approach. CLDP helps build the capacity of “enforcers” of IPR, such as judges and Customs services. In addition, CLDP helps countries develop their own technological innovations, so that they will have a strong interest in enforcing IPR. CLDP does so by providing technical assistance with academia-to-business technology transfer, as well as by working with entrepreneurs’ associations

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and technology incubators. CLDP's has been actively engaged in the Muslim world – in the Maghreb, in the Middle-East, in the Gulf, and, beyond, in countries such as Pakistan and Kosovo. In the process, CLDP has developed unique methodologies and instructional materials used by innovators.

The US Department of Commerce is involved in entrepreneurship and innovation throughout the cycle of developing new ideas and bringing them to market in a global economy. This role is especially vital to retooling and re-energizing the economy and creating sustainable jobs in the 21st Century under the Obama Administration. The experience gained by CLDP in fostering technology-based entrepreneurship in the Muslim world is part of the Department of Commerce's support of entrepreneurship and innovation. This book is a part of that contribution.

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# FOREWORD

By ROBERT F. GODEC

*Former U.S. Ambassador to Tunisia, 2006-2009*

Relations between the United States and the countries of the Maghreb go back to the birth of our country. In 1777, Morocco was the first country in the world to recognize the new United States of America. Other countries in the region also quickly established ties with our fledgling nation, including Tunisia in 1797.

In the years since, our relations with the Maghreb have expanded and deepened. Particularly after the nations of the region achieved independence, the United States provided substantial assistance for economic and social development. One example is the Commercial Law Development Program (CLDP) of the U.S. Department of Commerce. At the behest of the US embassies in the Maghreb, the program has assisted Tunisia, Algeria, and Morocco, to strengthen economic and commercial relations with their partners.

Beginning in 2004, the U.S. embassy in Tunis asked the Department of Commerce/CLDP to assist Tunisia in its efforts to develop capacity in the management of technology and of intellectual capital. To do so, CLDP established closer relations with the leading schools of the 7th November University of Tunisia, principally the Institut d' Hautes Etudes Commerciales (IHEC) and the Ecole Polytechnique (EP). A group of Tunisian opinion leaders, including professors, government economic development officials and business representatives, was invited to visit several public and private universities in the United States and select one for close collaboration.

The Tunisian delegation unanimously selected Rensselaer Polytechnic Institute (RPI) as partner with the 7th November University. RPI, founded in 1824, was the first engineering school in the United States. It was created for “the application of science to common purpose of life”, a major challenge for the pioneers of our country.

In the early 1980s, the Capital Region of New York State, where RPI is located, faced a major loss of employment when General Electric and other companies moved production elsewhere. To meet this challenge, RPI took the initiative to create one of the first U.S. university business incubators and technology parks, to assist entrepreneurs start innovative companies to create wealth, high value-added jobs and exports. During the last 30 years, over 250 companies have been created, with survival rate above 80 percent. With the support of New York State government and local initiatives, the Capital Region is now the center of a \$5 billion “Nanotech Valley.”

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The challenges faced by New York and RPI over these 30 years appeared, to both U.S. and Tunisian officials, to offer insights into those confronting the countries of the Maghreb. The hope of all involved was that the experience and practical knowledge Rensselaer developed could be translated into a project that would benefit the Maghreb.

CLDP, RPI and the Embassy in Tunisia worked closely to design and carry out the multi-year program of cooperation. The goal was to transfer RPI/Lally's knowledge and experience to Tunisia, and specifically to the Institut d' Hautes Etudes Commerciales and the Ecole Polytechnique. This objective was achieved through: 1) frequent visits and meetings among RPI, IHEC and EP personnel, 2) training courses at RPI, 3) visiting professors from RPI teaching at IHEC and lecturing at EP, and 4) two symposia in Tunis attended by leading American, Tunisian, Algerian, Moroccan and Saudi Arabian scholars, government officials and business representatives.

Throughout the project, the organizations worked closely together. They shared knowledge and learned from one another. The result was stronger and better cooperation on technological innovation and entrepreneurship to the benefit of both Tunisia and the United States.

To increase awareness of the project, CLDP asked three professors from the Lally School of Management and Technology of RPI, and two from IHEC, all leading scholars in international entrepreneurship and innovation, to summarize their knowledge in clear practical language in a case-oriented textbook, "Entrepreneurship and Innovation in the Maghreb," that would be published in three languages (Arabic, English, and French).

This book is the culmination of our multi-year US/Tunisian cooperation program. I hope the book will be a useful guide for entrepreneurs, government leaders, academicians, students and the general public.

In conclusion, I would to express the appreciation of the U.S. Government to everyone who worked on the project. I believe that this unique initiative of Tunisian and American scholars and practitioners will enhance the economic and social development of the Maghreb. I hope, too, that it will further deepen our technological and business collaboration, and help build our common prosperity.

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# CHAPTER 1: INTRODUCTION

## 1.1 The role of entrepreneurship in the economic development of the Maghreb

Entrepreneurship has flourished in the Southern and Eastern Mediterranean area for more than two thousand years. A shining testimony is the amphitheatre of El Jem in Tunisia, still in use today, that was built by an entrepreneur-trader who cultivated olive groves, processed the oil and sold it throughout the Roman Empire. Entrepreneurship flourished again during the expansion of Islam throughout the Mediterranean, then declined under the Ottoman Empire and the colonial period. After the Second World War, the newly independent countries of the Maghreb (Morocco, Algeria and Tunisia) experimented with a variety of political, economic and social systems with mixed results.

At present, progressive countries of North Africa and the Middle East, including the three Maghreb countries, have realized that entrepreneurship and innovation are the main vehicles for economic development and for achieving competitiveness in the globalizing world markets. Thus the purpose of this book is to assist the current well-educated generations of these countries to create and grow innovative small and medium business enterprises (SMEs) that will boost regional economic development with high-value-added jobs, exports and an improved quality of life.

While entrepreneurship was born in France in the eighteenth century, modern entrepreneurship is primarily an American concept that developed as a new scholarly discipline in American universities and is now taught worldwide.<sup>1</sup> In fact, American SMEs have been the major contributors to job creation and regional economic development in the United States. The share of employment of the 500 largest U. S. firms decreased from 19% in 1968 to 9% in 1996. Businesses with more than 500 employees dropped 4 million jobs in 1990-94, while firms with fewer than 50 employees swelled by 8 million new jobs. This trend is continuing. Large U. S. firms, such as General Motors and Ford are in a downward spiral of job reduction, while recently created innovative high-tech firms, such as Google and Cisco, continue to grow worldwide.

However, past experience has shown that it is difficult to transfer American and European entrepreneurship practices to developing countries and to countries with economies in transition. For instance, after the collapse of the Soviet Union, Finnish entrepreneurs planned to create twin new business incubators in Helsinki and St. Petersburg, which are only 443 kilometers apart, to develop joint Finnish-Russian businesses. After several years, it became clear that the St. Petersburg incubator was not feasible, due to the local bureaucratic and political environment. The solution was to train the new Russian entrepreneurs in the Finnish incubator

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and let them establish operations in both countries, as required by the nature of their business.

There is no doubt that the cultural environment of a country has an impact on how industrial enterprises and their personnel carry out their functions. Prevailing religious beliefs and cultural values, in conjunction with the formal system of education usually have direct and significant bearing on the dominant view toward work and achievement. In fact, it has been recently argued that globalization has neither standardized societies nor produced a homogenous world culture.

This is why entrepreneurship theory should take into account these differences. More importantly, entrepreneurship practice should be congruent with the cultural and social environment of the region. Similarly, the business support systems should be adapted to the country's legal, commercial and political environment. Thus, this book is a team endeavor by five authors of different backgrounds, one American, one Italian-American, one from Bangladesh now residing in the United States and two Tunisians, all with entrepreneurial and business experience. The cases are by American and Tunisian researchers.

As stated above, the objective is to help entrepreneurs and potential entrepreneurs in the Maghreb create and grow their own companies. This region includes three countries that share a strong religious, cultural and social Islamic heritage, and that have obtained independence during the last century. These nations also share a common challenge: to create meaningful and well-paid jobs for the recent graduates of local and foreign universities who want to contribute to the economic and social development of their countries. While each country may follow a different model of economic development, the realities of increased globalization and competitiveness in international markets are driving the Maghreb towards the creation of innovative SMEs so that these countries can become masters of their own destiny, independent of less-efficient government enterprises or distant multinational corporations.

While globalization envisions the entire world as a "global village" without trade barriers, the first step towards this ideal is to develop regional strategies that will take advantage of the geographic, historical and cultural affinities of countries in a region. The North American Free Trade Agreement (NAFTA), which includes the United States, Canada and Mexico, is a successful example of regionalization leading to globalization. Therefore, it appears that the Maghreb region is an appropriate and timely target for this book.

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## 1.2 The global competitiveness of the Maghreb and guidelines for economic development

Tunisia, Algeria and Morocco are the three North African countries that comprise the Maghreb.<sup>2</sup> They flourished as centers of Arab-Moslem culture, became *de facto* French protectorates and achieved independence approximately fifty years ago. They have maintained close cultural, economic and commercial ties with France, and utilize the French language in addition to Arabic for business and higher education. Their universities follow the French academic system, and many professors have degrees from leading French, European and American universities. The French connections have evolved into ties and agreements with the European Economic Community (EEC). In parallel, commercial and cultural relationships with the United States are becoming stronger, particularly in Tunisia and Morocco.

Table 1 shows the key geographic and economic indicators of the three countries and their global competitiveness ranking among 134 countries according to the World Economic Forum (2008)<sup>3</sup>. Tunisia (ranked 36) is the most competitive country in Africa, well ahead of South Africa (45) and one of the most competitive Arab countries, right after Kuwait (35). Tunisia's rank is comparable to that of China (30), the Czech Republic (33) and Puerto Rico (41) and well ahead of some Mediterranean countries: Italy (49), Turkey (63) and Greece (67). Morocco's ranking (73) is somewhat lower than the midpoint, comparable to Greece (67), Vietnam (70) and Colombia (74). Algeria's ranking (99) is relatively low, comparable to Argentina (88), Libya (91), Pakistan (101) and Venezuela (105).

There are many underlying reasons for the different rankings of the three countries. The World Economic Forum and Professor Michael Porter of Harvard have developed a methodology for measuring the global competitiveness of countries, which can be defined "*as the set of institutions, policies and factors that determine the level of productivity of a country.*" The level of productivity, in turn, sets the sustainable level of prosperity and drives the growth of the economy over the medium to long run.

The ranking of the countries are determined by three main indexes: basic requirements, efficiency enhancers, innovation and sophistication factors. The relative weight of these three indexes depends upon the stage of economic development of the country, which can be expressed in term of gross domestic product (GDP) per capita.

In the first stage, corresponding to the lowest GDP values, improvements in basic requirements (institutions, infrastructure, macroeconomic stability, health and primary education) are most important for economic development. This is the case of Morocco.

**Table 1. Geographic and economic indicators of the Maghreb countries**

GPD	Date of independence	Size (1000 square Km)	Population (millions)	GDP/purchasing parity* (\$ billions)	GDP per capita (\$)	Global competitiveness rank (1-134)**
Tunisia	1956	163	10.4	83.1	8020	36
Morocco	1956	446	31.4	138.2	4432	73
Algeria	1962	2383	34.8	241.1	6927	99

\*Source: International Monetary Fund, 2008 estimate

\*\*Source: World Economic Forum, 2008

In the second stage, corresponding to medium GDP levels, improvement in efficiency enhancers (higher education and learning, goods and labor market efficiency, financial market sophistication, technological readiness) are the most important factors. This is the case in Tunisia and Algeria.

Finally, in the third stage, corresponding to the highest levels of GDP/per capita, innovation and business sophistication factors are the most important. This is the case in developed nations like the United States, Western Europe, Japan and Australia. (No African countries have reached this stage as yet.)

Therefore, in evaluating global competitiveness, the *weight* of the above three indexes depends upon the stage of development of the country, as shown in Table 2.

**Table 2. Weight of the three indexes of global competitiveness of the Maghreb countries**

Index	Morocco	Tunisia and Algeria
Basic requirements	60%	40%
Efficiency enhancers	35%	50%
Innovation and sophistication	5%	10%
<b>Total</b>	<b>100%</b>	<b>100%</b>

Source: World Economic Forum, 2008.

The three indexes, in turn, comprise 12 sub-indexes. Table 3 shows the ranking of the indexes and sub-indexes for Morocco, Tunisia and Algeria.

**Table 3. Rankings of global competitiveness indexes and sub-indexes of the Maghreb countries**

Index	Ranking (out of 134)		
	Morocco	Tunisia	Algeria
Sub-index			
<b>Basic requirements</b>	<b>67</b>	<b>35</b>	<b>61</b>
Institutions	61	22	102
Infrastructure	70	34	84
Macroeconomics	84	75	5
Health and education	71	27	76
<b>Efficiency enhancers</b>	<b>85</b>	<b>53</b>	<b>113</b>
Higher education	98	27	102
Goods market efficiency	58	30	124
Labor market efficiency	128	103	132
Financial market sophistication	93	77	132
Technology readiness	78	52	114
Market size	57	62	51
<b>Innovation and sophistication</b>	<b>76</b>	<b>30</b>	<b>126</b>
Business sophistication	70	40	132
Innovation	78	27	113
<b>Overall Rank</b>	<b>73</b>	<b>36</b>	<b>99</b>

Source: World Economic Forum, 2008

On the basis of the data in Table 3, the situation analysis of the three countries can be summarized as follows. Tunisia is the leader in Africa and compares well with Middle Eastern and Mediterranean countries. Tunisian leadership in the Maghreb can be attributed to strong institutions, good infrastructure, good health services, good primary and higher education, high goods market efficiency, and a relatively high level of business sophistication and innovation. Tunisia's weaknesses are low macroeconomic stability, labor and financial markets. Technological readiness is

average, and therefore Tunisia has trouble translating its innovation capabilities and technology transferred from industrialized countries into improved productivity and manufactured products, particularly for export.

Morocco has medium-level institutions, infrastructure and goods market. However, Morocco shows poor health services, primary and higher education, macroeconomic stability, and suffers from extremely low labor market efficiency. Financial market sophistication is ranked low by WEF, but higher from other sources. Morocco also has below average business sophistication, innovation and technological readiness.

Algeria is extremely strong in macroeconomic stability thanks to oil production. It has medium-level health services and primary education, but low-level higher education. The labor and financial market efficiencies, as well as business sophistication are among the lowest world rankings. Innovation, technological readiness and the goods market are also quite low.

The above in-depth situation analysis leads to some general policy recommendations for improving the global competitiveness of the Maghreb countries. The three indexes and 12 sub-indexes can be viewed as links in the chain representing the global competitiveness of the country. In order to strengthen the chain, the weakest links must be strengthened first, and later the other links can be improved. Based on this analogy, it appears that Tunisia and Morocco should urgently improve their macroeconomic stability, and the efficiency of the labor and financial markets. Morocco also needs to improve its health and primary education infrastructure, Algeria and Morocco their university education and innovation capabilities. Algeria should also urgently improve the infrastructure and business sophistication. Finally all three countries will benefit from improving their technological readiness, in order to be able to accept, assimilate and implement modern technology from developed countries.

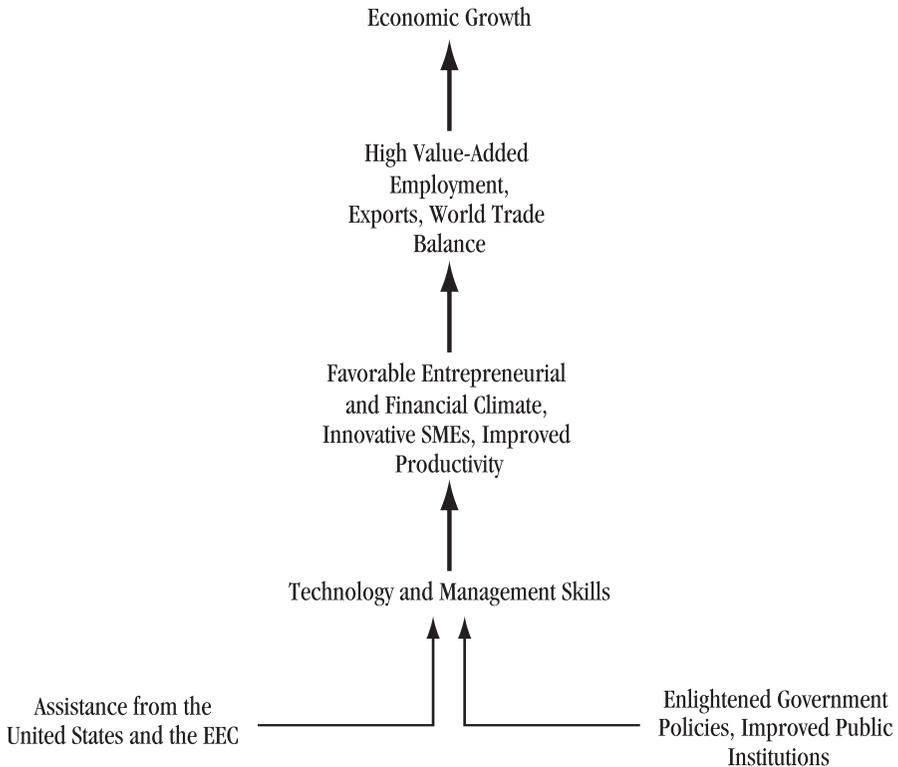
On December 15 and 16, 2005 the U.S. Department of Commerce, the Embassy of the United States in Tunisia and Rensselaer Polytechnic Institute organized the Tunis International Symposium, "Entrepreneurship and Economic Development in the Middle East and North Africa," attended by 200 representatives from the United States, France, the Maghreb countries, Saudi Arabia, Dubai and the Arab Science and Technology Foundation.

During the symposium, speakers from Western and Arab countries pointed out that technological and business management assistance is available from developed countries, primarily from the European Economic Community, the United States and Canada. However, the recipient countries should be ready to transfer efficiently, assimilate, adapt and finally implement in practice the acquired knowledge. The levels of technological readiness and higher education sub-indexes of Table 3 will determine the effectiveness and speed of the transfers. Based on the enhanced knowledge, established companies can improve their productivity and, more importantly, innovative entrepreneurial SMEs can be created, which will be

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competitive in the global market place and will contribute towards high value-added employment, exports, trade balance, macroeconomic stability and finally, sustainable economic growth. Using these considerations, Figure 1 shows a roadmap for the economic development of the Maghreb.

**Figure 1. Roadmap for the economic development of the Maghreb**



### 1.3 High-value-added entrepreneurship and innovation

The concept of entrepreneurship is extremely broad, and it varies depending on geographical and cultural factors. It can mean anything from creating and managing a one-person clothing boutique to a multi-national enterprise like Google. For the purpose of this book, we propose the following definition, derived from Baron and Shane: “Entrepreneurship is a business activity, where opportunities to create something *new* (e.g. new products or services, new markets and communication systems) are discovered or created by *specific persons*, who then use various means to *exploit* and *develop* them, for the purpose of *creating value* for the business and for society” (emphasis added).

This definition is a *process* definition because it relates to the sequence of activities of the entrepreneur, in recognizing opportunities, exploiting and developing them as a business venture and obtaining tangible valuable results for the business (sales and profits) and for society (improved quality of life, higher employment and economic development).

This definition also sharpens the scope of this book and imposes important limitations:

1. The new enterprise should be *innovative*, that is, it should be based on new products or services or processes, or markets, with high potential growth. This excludes a majority of small business that merely copy what others have already done, such as pizza parlors.
2. The new enterprise should continue to *develop the opportunity* (product, service, market) thereby striving to increase sales and profits and employment. This excludes “lifestyle businesses” and “mom and pop stores” that have no intention to grow and expand.
3. The new enterprise should create *high added value* for the entrepreneurs, the employees, customers and society, that is, should strive to become a successful and sustainable business. This excludes inventors and educators who are not interested in exploiting fully their business opportunities, and non-profit organizations.

Value creation is directly related to innovation and, in fact, the economies of the most competitive countries in the world (for instance, Finland, the United States and Taiwan) are based on high-value-added, relatively young, innovative companies like Nokia, Microsoft and Acer.

For developing and industrializing countries, innovative SMEs represent a major natural resource, because they:

- create direct high-value-added jobs;
  - create indirect jobs (estimated ratio of 5 to 1);
  - are more innovative and efficient than large public or private businesses<sup>4</sup>;
  - often are valued partners of large businesses<sup>5</sup>;
  - promote exports and contribute to the country’s balance of payments;
  - improve the quality of life;
  - do not rely on scarce national resources;
  - are diversified in technologies and markets, and thus less vulnerable to economic recessions and major shifts in consumer demands and in dominant designs and technologies;
-

- are models for developing entrepreneurship and innovation in a country or region;
- are the major source of job creation.

However, new entrepreneurial ventures also suffer from a high mortality rate. The smaller the company, the lower its probability of survival over time. In the United States, typical 4-year survival rates are 37% for small companies (1 to 19 employees), 56% for medium companies (20 to 499 employees) and 68% for large companies (500+ employees). The companies that have disappeared may have failed, been acquired, changed their names or simply closed down. Obviously failures entail major economic, psychological and social problems for the entrepreneurs and their families, the employees and the community.

A direct consequence of these statistics is that for every three new jobs created, one is permanent and two are temporary (lasting fewer than four years). Therefore, the objective of regional economic development programs should not only be to encourage and assist entrepreneurs in creating new ventures, which is relatively easy in many countries<sup>6</sup>, but also to support these companies in their first two to three years, so that they can grow and rapidly reach a critical mass of 20 employees and sales of \$1 to \$2 million.

An effective way to stimulate growth and achieve high-value-added output is through innovation, both in new ventures and in established companies, this last task being more difficult. Innovation can take place in many business areas: marketing, finance, information systems, organization, human resources, but we will concentrate on technological innovation because technology is one of the globally dominant factors for the competitiveness of countries.

While invention implies discovery and originality, innovation is often the creative application of existing technologies to new products, processes or services. For instance, the diesel-electric locomotive, developed by General Motors in the 1930s, was a synergistic combination of older technologies, the diesel engine utilized for ship propulsion, the electric generator and motor, and the standardized assembly line process of Detroit. In practice, a technological innovation can be implemented in three ways:

1. embodied in the products offered (cellular phones, heart monitors);
2. utilized in the production process (welding robots, chip manufacturing);
3. offered as on-line services (e-commerce, buying rapid transit tickets by mobile phone in Finland).

Entrepreneurs in industrializing countries should select the most appropriate technologies for their company, not necessarily the most sophisticated ones, which may be difficult to transfer and implement locally. Many of these appropriate technologies are available at no cost or may be obtained at low cost from

industrialized countries with assistance from government and non-government organizations, or through joint ventures with established companies that want to expand into emerging markets.

A typical example is the technological and economic evolution of Taiwan from 1950 to 2005. At the end of the war, Taiwan was one of the poorest countries of the Pacific Rim. In 2004, Taiwan ranked number 4 in world competitiveness (after Finland, the United States and Sweden) and number 2 in technology (after the United States). Taiwan achieved this high ranking by gradually upgrading its technological capability, working with multinational corporations, and transferring technology from Silicon Valley by encouraging Taiwanese Ph.D.'s to return to Taiwan to teach in universities and do research in technology parks. In contrast, Mexico was ranked 48 in world competitiveness and technology. Although Mexico is contiguous to the United States and has had access to the same U.S. technologies as Taiwan, the transfer to local industry has been ineffective<sup>7</sup>.

In summary, small and medium entrepreneurial firms are more innovative, more efficient and more socially effective than large private or government-owned companies, but they also suffer a higher mortality rate, due to their inability to grow and realize their business and economic potential. The main causes are:

- wrong strategic thrusts (launching uncompetitive products and/or targeting unattractive markets);
- lack of human, technical, and financial resources;
- poor market coupling (assuming that the new product will “sell itself”);
- lack of focus (shifting from one product to the next, before learning from market feedback);
- lack of management versus entrepreneurial skills as the business grows in size and scope.

In more conservative cultures and smaller countries there are two additional causes: the fear that growth may entail loss of control by the owners, and the fear of becoming international with higher risks of market instability, currency fluctuations and more aggressive competition.

This last limitation to growth is particularly serious for developing countries with few natural resources that must export in order to survive and grow their economies.

The effect of all the infrastructure constraints listed above can be greatly reduced by developing the infrastructure for technological entrepreneurship and by creating support systems for entrepreneurial small and medium firms.

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## 1.4 Infrastructure and environment for the development of entrepreneurship and innovation

Industrialized countries are well aware of the contributions of innovative SMEs to economic development and job creation. Therefore, they have developed an array of public and private initiatives for nurturing entrepreneurship and assisting new ventures to grow successfully. In turn, these initiatives have created an environment that encourages risk-taking by entrepreneurs and allows them to try again if they fail. We will discuss here in detail government policies and major initiatives in the United States and Finland, the two most competitive countries in the world in 2005. In the United States, these initiatives have been mostly at the local level from private and public sources. A typical example is the economic renaissance of the New York Capital Region (Albany, Schenectady and Troy) with approximately 500,000 inhabitants. This region had been a center of America's industrial development (1820-1945) but declined rapidly after the Second World War, when General Electric, the major local employer, decentralized operations to the Southern states and overseas. As a result, GE employment fell from 35,000 in 1946 to 6000 in 2006. Other companies, from textiles to automobile components, also left the area. Unemployment rose to double digits, and today downtown Schenectady is partly abandoned.

George Low, who was president of Rensselaer Polytechnic Institute (RPI) at that time, realized that unemployment could only be reduced by creating innovative SMEs that utilized the many technologies being developed by RPI professors and researchers. In 1980 RPI created one of the first informal university incubators in the United States, which was formally organized in 1982. A vacant building was converted to laboratory and office space, and entrepreneurs from the faculty, students, alumni and community were invited to rent space at reduced rates and to receive technical and management assistance for creating and growing their companies. The results during the last 25 years have been outstanding with 250 new companies created and over 1000 assisted. The survival rate of the incubator companies is higher than 80% (in contrast with the U.S. average rate of 40%). More than 2500 high-value-added jobs have been created, 90% in the New York Capital region. Many founders are now millionaires. Students, faculty and alumni, and outside members share evenly, each receiving about a third of the incubator's resources. Two thirds of the participating companies have evolved from research conducted at RPI or through innovations developed by RPI alumni. In late 2008, the incubator employed over 250 students, faculty, staff and community members in 32 technological businesses.

In 1983, RPI developed on vacant land the Rensselaer Technology Park for the permanent home of "graduated" incubator companies and for established companies that wanted to take advantage of RPI's knowledge and facilities. Here again the results have been outstanding. In 2008 there were 65 companies with more than 2500 employees in 20 buildings located in an ecologically and

aesthetically well-planned green area of 500 hectares. The RPI Incubator and Tech Park were financed exclusively by the Institute, a private university, without government grants. This initiative sparked the renaissance of the New York Capital Region. With the assistance of the State of New York and multinational corporations such as IBM and GE, the area is now becoming a world center for nanotechnology, high-speed computing, energy research, biotechnology, electronic arts, etc. As a result, the unemployment rate in the region fell in 2007 to 3.8% (compared to 4.9% in the United States). Local companies have benefited from R&D grants from the New York Science and Technology Foundation, R&D grants from the federal government, financing by local business angels and venture capitalists.

Today, U.S. entrepreneurs are assisted by a great variety of public and private initiatives, poorly coordinated and sometimes overlapping. This approach, which sometimes appears to be wasteful and discontinuous, allows for experimentation, market feedback and Darwinian survival of the fittest. In contrast, the approach of Finland, a small country of 5.2 million inhabitants with scarce natural resources, has been directed and coordinated by the government. After the collapse in 1991-93 of Finland's main trading partner, the Soviet Union, unemployment in Finland reached 19%. In 1995, the ministries of Trade and Industry, Labor, and Agriculture and Forestry decided to merge and decentralize their job creation and economic development activities by creating an employment and economic development center (TE-Center) in each of the 15 Finnish provinces. The Helsinki TE-Center launched the "jobs through entrepreneurship" project, on the premise that new jobs are created through new companies, with emphasis on technology. This is the base on which the service package for attracting and supporting entrepreneurs has been built. The three ministries announced that they would allocate the equivalent of € 1.29 million, voted by parliament, to the incubator project, supplemented by € 0.86 million of European Community funding for a total of € 2.15 million. Immediately there were 30 applicants in the region who wanted to start their own incubators. The TE-Center made a joint feasibility study with each applicant, which was financed 75% by the TE-Center and 25% by the applicant. As a result, 16 proposals were approved. These 16 incubators are non-profit organizations, financed by the TE-Center for 50% of their budget. The other half comes from operations, sponsors, municipalities, universities, grants and other sources. The TE-Center budget has remained constant since 1996 at € 2.15 million and, thanks to strong support by the government, the 50% financing was assured until the end of 2009.

In summary, incubators in the United States reflect the strong individualistic "cowboy" culture of the country, growing and fading like wild flowers, while entrepreneurs have to fight to obtain assistance and financing throughout the life of their companies. In contrast, incubators in Finland are like a well-planned and well-cared-for garden, with minimum overlap and maximum cooperation. In parallel to the Finnish social welfare state, Finnish entrepreneurs are assisted from

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“cradle to maturity” through a variety of programs, from initial financing to R&D grants and infusion of venture capital. In return, to obtain this assistance, new ventures are subject to certain limitations and directives. For instance to obtain R&D grants, companies must be active in first-priority industries (information and communications, factory automation, biotechnology and new materials) and must plan to export.

The economic and social accomplishments of the two systems are comparable. In the U.S. sample of 40 incubators started in the 1980s, tenant firms had created an average of 468 direct and 702 total jobs, from start-up to maturity. In Finland, the average was 13 jobs, because of the later introduction of incubators. The cost effectiveness of job creation was high in both countries. The actual cost of establishing a new job in the incubators was \$1,109 in USA and \$6,450 in Finland, well below the annual welfare cost per person, not to mention the social costs of unemployment. As discussed above, unemployment in the New York Capital Region, is now well below the U.S. average. In the Helsinki region, the rate fell from 17% in 1997 to 7.3% in 2003, well below the EEC average<sup>8</sup>.

It appears that the Finnish model for economic development and job creation is better suited for industrializing countries with limited natural resources and high population growth such as Morocco and Tunisia. Thanks to the recently modernized and liberalized tertiary education systems, universities in these countries are graduating each year new generations of professionally prepared young persons, who are seeking positions where they can utilize fully their acquired knowledge. Unfortunately, the jobs available in their countries are insufficient. The graduates who cannot find adequate employment are faced with three unpleasant choices: (1) accept low-paying unsatisfactory jobs as available (2) remain unemployed, (3) emigrate to other countries. The first two solutions will cause severe personal, social and political problems; the last entails a “brain drain” where the best leave the country, often forever.

In summary, job creation and economic development is strongly correlated with the creation, survival and growth of innovative businesses. In turn, the success of these businesses is strongly dependent on the infrastructure for technological intrapreneurship. We list in Table 4 the main elements of this infrastructure and, as an example, indicate representative organizations and facilities now available in Tunisia.

**Table 4. Infrastructure for technological entrepreneurship in Tunisia**

Element	Examples
Universities and technical institutes	Ecole Polytechnique Institut National des Sciences Appliquées et de Technologie (INSAT)
Research institutes	Telecommunications research institutes
Business schools	Institut des Hautes Etudes Commerciales (IHEC), Institut Supérieur de Gestion (ISG), Ecole Supérieure de Commerce (ESC), etc
Student and faculty exchanges, practicums	IHEC Carthage and RPI
Higher technical schools	ENIT, ENSI, etc.
Entrepreneurship courses	IHEC, ISG, ESC, etc.
Business plan competitions	Sponsored by major business groups and banks
International assistance	U.S. Department of Commerce U.S. Embassy, European Economic Community
Government assistance to SMEs	Agency for Promotion of Industry (API), National Agency of Self-employed (ANETI)
R&D grants	Funds for the Promotion of Industrial Decentralization (FOPRODI), Program for the Modernization of Industry (PMI), Mise à Niveau, InfoDev, Incubator Support
Business angels	Individual investors
Venture capital	Society for Investments in Venture Capital (SICAR)
Spin-offs	Large enterprises (Chemical group, Tunisian Society of Electricity and Gas, National Office for the Environment, National Society for Water Distribution, etc.)
Small business consulting	Business research offices, consultants, coaches and experts
New business incubators	University incubators, etc.
Technology parks	El Ghazala (Tunis), Sfax, etc.
Chambers of Commerce	Tunis, Sfax, Sousse, Nabeul, etc.
Clubs for entrepreneurs	Centres des Jeunes Dirigeants (CJD)
Exchange of students and faculty, internships	IHEC and RPI

Many of these elements are operational in Tunisia; others are still in the development stage and not yet fully operational and effective. Nonetheless, the overall environment is favorable to entrepreneurship and government policies and actions are supportive of technological entrepreneurship, the creation of incubators and technology parks, and strong cooperation with developed countries<sup>9</sup>. In fact, as discussed in Section 1.2, Tunisia is the most competitive nation in Africa. Small isolated nations are at a disadvantage in competing in world markets that are coalescing into strong regional trading areas (NAFTA, EEC and MERCOSUR). Due to geographic proximity and historical heritage, the Maghreb is a natural nucleus of a possible wider North African trading area. Entrepreneurs in these and neighboring Arab countries are starting cooperation and joint ventures.

In conclusion, the infrastructure and the environment for innovative SMEs is developing at an accelerated pace in North Africa and the Middle East, but continuing assistance will be required for at least a decade from developed countries.

## **1.5 The expanding role of universities**

Throughout the world, universities have always been the seedbeds for developing and promoting innovative ideas and original processes to stimulate technological, business, economic and social progress. Many of the leaders of the independence movements in the Maghreb as well as higher government officials in Algeria, Morocco and Tunisia have studied in European and American universities. Therefore, an important priority for these countries has been to upgrade and modernize their universities in order to educate the new generations of leaders and intellectuals.

The role of universities in the Maghreb is expanding beyond the traditional academic activities of instruction and theoretical research to more active contributions, to practical technological and business knowledge and even to significant assistance for regional economic development and wealth creation. The evolution of the more progressive universities in the Maghreb follows and adapts this pattern exhibited by leading universities in European countries (Great Britain, Sweden, Finland, and France) and in the United States since the end of the Second World War. However, there is a time lag of 20 to 30 years due to the reconstruction period after the Maghreb countries gained independence.

In the United States, there have been three major waves that have expanded the mission and economic contributions of leading technology-intensive universities.

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### 1.5.1 The first wave

After World War II, there were no *systematic* methods for transferring to civilian industries and adapting the many technological innovations that had enabled the Allies to win the war, such as electric power production from nuclear sources, radar control of air traffic, even instant cooking with microwaves.

Therefore, many scientist and engineers who wanted to help rebuild the world and improve the quality of daily life became entrepreneurs and created their own companies to develop and commercialize their technologies. They gathered into geographical clusters to network with each other, for easier access to university laboratories and academic colleagues, and to employ new local graduates. Typical examples are the technopolises of Route 128 near Boston, Massachusetts (MIT and Harvard), Silicon Valley near San Francisco (Stanford University) and later, Cambridge in Great Britain. These clusters developed into “centers of excellence” and attracted more scientists, engineers and entrepreneurs, and eventually business angels and venture capitalists. These expanding clusters became the drivers of regional economic expansion and the creators of wealth for the entrepreneurial companies, the employees and the communities.

Up to this point, the universities did not take major roles in the development of the clusters, but maintained close relationships with their alumni, many of whom had risen to high management and technical positions. Some universities created industrial liaison offices to commercialize their intellectual property and obtain research grants from industry, scholarships, etc. However, there was resistance from traditional academics, who felt that the integrity and independence of universities would be compromised by these “commercial” initiatives. Similarly, local and state government did not participate actively in these initiatives.

### 1.5.2 The second wave

The rather loose, informal relationships between universities, entrepreneurial clusters and regional governments changed in the early 1980s. The United States was stunned by its loss of competitiveness to Japan in automobiles and consumer electronics that led to high unemployment, a negative balance of payments and the lack of profitability for major companies. For instance General Motors, IBM and Kodak registered losses of billions of dollars and laid off hundreds of thousands of loyal employees. To preserve profitability, Jack Welch, the new CEO of General Electric, dismissed 80,000 employees of all ranks, 20% of the GE work force. Several cities, like Schenectady and Troy in New York State and Bethlehem, Pennsylvania, became ghost towns. At that time, new jobs were created *only* by the new entrepreneurial companies. However, many of these new companies failed for lack of business knowledge and financial support.

Therefore community leaders, local, regional and state government officials, and some organizations of the federal government turned to universities, the traditional sources of innovation and social renewal, to assist in the creation of new

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entrepreneurial high-value-added businesses, that would create high paid employment, sales to other parts of the country, and exports that would improve the standing of the entire community.

The preferred mechanism for creating high-value added entrepreneurial companies was the “New Business Incubator,” situated on or close to the university campus. The first incubators were in the United Kingdom, but this phenomenon flourished in the United States with a greater impact. One of the first U.S. university incubators was informally created in 1980 at Rensselaer Polytechnic Institute, as discussed above (Section 1.3).

By definition, an incubator is a mechanism to stimulate the creation and early growth of companies (Section 1.4). When these companies go into production, they must move to permanent quarters, with modern premises, and be ready to pay commercial rents. Many companies preferred to remain within the creative climate of the campus and maintain their connection with the university, for technical and business consulting with the faculty, employment of students and graduates. Therefore, they moved to technology parks, owned and operated by the universities.

In parallel, local and state governments became cognizant of the economic and social value of incubators and technology parks, and started offering major financial incentives to developers of new technology parks and to prospective tenants.

### 1.5.3 The Third Wave

The great majority of U.S. incubators (at least 90%) were created by non-profit organizations and have adjusted rents in order to break even or to live within the subsidies received from their sponsors. As the incubator companies and especially the graduates became profitable, some universities wanted to participate in this new process of wealth creation and earn returns on their investment. They mainly used the following mechanisms:

- Higher rents and payments for formerly “free” services. This revenue is limited by the fact that the incubator companies are usually short of cash and “shop around” for the lowest rents.
- Payments for intellectual property of the universities licensed to the incubator companies. In the United States, university employees, regardless of rank, must transfer without charge all their inventions to the university. Thus, the university can charge royalties (ranging from 2% to 7% of sales) to companies started by professors, researchers and students. Obviously, most payments begin after “graduation” from the incubator.
- Participation in the company’s equity by requiring tenants to offer shares to the university, from 2% to 7% of the total. However, some entrepreneurs are reluctant, indeed paranoid, about giving up ownership. Therefore the university may lose high-potential tenants.

- Venture capital (VC) funding by the university. Some universities make substantial investments as part of their endowments and are authorized to assign a small amount to venture capital investments. However, most universities are psychologically adverse to such “speculations,” they lack competencies for VC investing and prefer to obtain research contracts and grants from foundations and established companies.

In parallel, local and state governments expanded their contributions for the creation of technology parks, tax-free industrial zones for export, etc. Science and technology foundations offered R&D grants, venture capital, loans with favorable conditions, and assistance to the entrepreneurial companies located in the parks and in the nearby communities.

#### 1.5.4 Summary

This historical review of the important contributions of universities to innovative technology development, new venture creation and regional economic development, has concentrated on the United States because it is considered the pioneer in parallel with Great Britain. The mission of U.S. university incubators has expanded, as shown by the example of RPI in Table 5.

**Table 5. Changes in the mission and objectives of the RPI Incubator**

Phase	Dates	Missions	Objectives
1	1980 - 2009	New venture creation	Wealth for entrepreneurs
2	1982 - 2009	Regional economic development	Job creation, urban renewal
3	1990 - 2009	Technology transfer and commercialization	Wealth for universities
4	2000 - 2009	Corporate entrepreneurship*	Assist in wealth creation for companies, obtain research grants

\*secondary mission through relationships with major corporations such as GE, Intel and IBM

## 1.6 Universities, incubators, technology parks and technology transfer in the Maghreb

In the more progressive industrializing countries, the role of universities has evolved according to the pattern described above, albeit more slowly. The main reason is that most of the universities in these countries are public and therefore controlled

by the government. Following the examples of Taiwan and South Korea, it appears that Tunisia is now entering into the second wave with the creation of incubators and technology parks, for instance at the Ecole Polytechnique (Polytechnic School) and in the El Ghazala Technology Park. The business school (Institut des Hautes Etudes Commerciales or IHEC) offers courses in entrepreneurship, taught by both local academics and foreign visiting professors. Nonetheless, the ties between universities and entrepreneurial companies need to be strengthened, and the academics and students need to be encouraged to work more closely with innovative SMEs. Exchanges of faculty and students with universities in developed countries are becoming more frequent. Furthermore, entrepreneurship is not only encouraged within universities and among young people, but an “*essaimage programme*” (spin-off program) has been launched to encourage even the not so young to set up their own businesses.

Morocco has developed its own national research policy. Contributors to this policy include the Hassan II Academy for Science and Technology, the Permanent Interministerial Committee for Scientific Research and Technological Development, the Public Research Institutes and the National Center for Research in Science and Technology and Universities (CNRST). The results of this collaboration can be seen through the strategies and measures that aim to enhance innovation and technology infrastructure in Morocco. The first step in this process has been the adoption of the University Reform Act, which places the emphasis on strengthening the relationship between universities and economic actors. Article 7 (01-00) of this policy states that universities can offer remunerated services, create incubators of innovative companies, exploit patents and licenses and market the products of their activities. It also states that, using resources derived from the latter activities, universities can strengthen their entrepreneurship activities by participating in state-owned and private businesses, as long as their participation is less than 20 percent of the companies’ share capital. Universities can also create subsidiary companies if these companies’ activities involve the production or marketing of goods or services in the economic, scientific, technological and cultural domains, and that the universities hold at least 50% of the share capital of these subsidiaries.

There has also been a serious attempt to organize research through a well-managed incubator and technology park network. An important player in this network is the Morocco incubation and spin-off network (RMIE)<sup>10</sup>. RMIE is a government program whose objectives are to “raise awareness of entrepreneurship and technology transfer, commercialize research, create high-tech jobs, affect policymaking, professionalize incubators, and promote best practices (training), to provide an international vision of technology-transfer policy in Morocco, knowledge sharing and organizational learning within the global innovation incubation community”<sup>11</sup>. Other players like Casablanca Technology Park and the Al Akhawayn University incubator also offer entrepreneurship training. Morocco is successfully establishing guidelines for innovation according to a policy for research and innovation that brings together economic entities and universities. However,

implementation to date of the national research policy initiatives has been slow and spotty and there are reservations about the effectiveness of the program.

Algeria, with its abundant cash, is trying to develop a strong foundation in information and communication technology (ICT). The huge technology center Sidi Abdallah, which comprises three technology parks, was developed under the ICT Development Support Project launched in cooperation with the World Bank. A cyber park was also created, along with a “Technobridge Incubator” in the technology park to support start-up companies and innovative SMEs and to provide development support to the Institut National des Télécommunications (INT) and to the Ecole Centrale des Postes et Télécommunications to revamp courses on ICT management and cyber entrepreneurship<sup>12</sup>. The goal is to increase wealth while promoting the culture of innovation and competitiveness in both businesses and knowledge-based institutions.

Since the Maghreb countries have limited human and managerial resources, we suggest that they follow the structured example of Finland (Section 1.3) rather than the unstructured example of the United States as they develop their incubators and tech parks. It would be better to concentrate on a few carefully planned, organized and financed incubators and tech parks, with clear missions and policies, rather than on reaching into numerous communities, some of which lack suitable universities. Also, since establishing self-supporting incubators and parks may take from three to five years, government funding should be assured for at least five years and should not be subject to politics and instability.

The success of incubators and technology parks is highly dependent upon technology transfer from local universities and research institutes and from industrialized countries. The following are four empirical “laws” for successful technology transfer.

- *Technology is transferred by people, not paper.* While science is universal, technology is heavily dependent upon tacit knowledge and specialized know-how that can only be transferred by personal interaction between people, not by lengthy reports and detailed written instructions. Therefore, universities in the Maghreb should encourage visits to and from peer institutions in Europe, with an emphasis on French-speaking countries, the United States and Canada. They should also formalize regular exchanges of faculty and students.
  - *The frequency of interaction between people offering and receiving technology is inversely proportional to distance.* Experiments have shown that interaction decreases by half when two persons, who were sitting one meter apart, are moved to different rooms 25 meters apart. Modern communication such as the Internet has reduced the effect of distance, but in our opinion these methods are only effective for team work when there has already been personal contact between the parties. This is one major advantage of technology parks and incubators located on or near universities complexes.
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- *Market pull is more effective than technology push.* For instance, the laser, the first source of coherent light, was discovered in 1958, but the first practical application was not developed until 1970 because no market development efforts had been made. In contrast, the latent demand for portable computers was the driving force for the rapid development of the Toshiba laptop, which primarily used available or incremental technologies. Since many academics are not skilled or interested in marketing their inventions and innovations, this function should be the task of university industrial liaison offices or, more effectively, of entrepreneurs in incubators and technology parks.
- *Embodied technology is easier to transfer than disembodied technology.* Because of tacit knowledge, disembodied technology in the form of patents, technical reports, etc. contains less useful information than technology embodied in commercial products and operating processes. Here again, incubators and technology parks play a vital role in enabling entrepreneurs to produce prototypes for beta-testing by customers, obtain grants and venture capital, and receive introductions to major potential customers.

## 1.7 Modalities for entrepreneurship and innovation

The definition of entrepreneurship as a process, presented in Section 1.3 above, allows for various means and modalities to exploit and develop new opportunities for the purpose of creating value. These modalities include new venture creation, acquisition and mergers, joint ventures, franchising, licensing technology, spin-offs from universities and established companies<sup>13</sup>. We will concentrate in the next chapter on new venture creation, the most attractive modality for developing countries and the easiest to implement successfully. First, however, we will discuss briefly the other modalities.

### 1.7.1 Acquisitions and mergers

In developed countries, successful new ventures are frequently acquired by larger, established companies<sup>14</sup>. While financially attractive and easier to implement than an initial public offering (IPO), such acquisitions and mergers create a dilemma for the entrepreneurial team.

- (1) Should they stay and enjoy the support of the acquiring company but also be hemmed in by the detailed and restrictive policies and procedures of the much larger, more mature and more conservative established company?
- (2) Or should they take the substantial payments and start another company in a similar area, thus avoiding direct competition with their former company?

In the second case, there may be an exodus of key people, with severe consequences for the acquired business.

In developing countries, only a limited number of acquisitions and mergers can take place within a country and even fewer within a region. Foreign multinationals might attempt to acquire local entrepreneurial companies and add them to their portfolio, with the negative effects mentioned above, plus the difficulties of operating with distant headquarters steeped in different cultural dimensions. A better alternative for local SMEs is often a joint venture.

### **1.7.2 Joint ventures**

Joint ventures between established companies in developed countries and innovative SMEs in industrializing countries are attractive, since they offer advantages to both parties. The established company contributes technical, product, production and general market know-how, while the innovative SME contributes detailed knowledge of the local market, key customers, human resources, local regulations, possible sources of financing and government incentives. The local SMEs will also understand how to customize products and services for local preferences.

The disadvantages of such joint ventures often arise from the imbalance between the two parties: (1) a well-established powerful, not very flexible, bureaucratic, but resource-rich corporation, and (2) an innovative entrepreneurial venture, still in the development stage, with limited resources, skeletal organization, highly dependent on the founders. This imbalance may lead to domination of the venture by the senior partner and to severe cultural, strategic and operational disagreements between the two partners. These disagreements are better resolved through frequent open meetings and discussions, rather than by strict observance of contractual obligations.

There is also the key question of splitting the equity and profit of the joint venture between the two partners. The established company often demands a strong majority, in order to control the joint venture. The innovative SME wants to maintain independence and may feel that its contribution is not sufficiently recognized and adequately rewarded. On the other hand, if a significant majority of the joint venture equity is held by the local venture, the established company may lose interest and motivation to contribute, because of the limited profit. A 50-50% venture might appear ideal, but is subject to paralysis if both parties cannot agree on major decisions, such as strategy, financing, hiring and dismissing key personnel.

Experience shows that the success of joint ventures is based on mutual trust, as is often the case for any type of business transactions in North Africa and the Middle East. With sustained trust, the joint venture ceases to be a zero-sum game and becomes a positive sum game<sup>15</sup>.

### **1.7.3 Franchising**

Franchising allows SMEs in developing countries to maintain their independence, while acquiring the expertise, support and brand name of established companies.

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This modality is quite effective for services, such as hotels, restaurants, travel agencies, automobile service stations and distributors. The local company is trained to develop and manage the business as an independent company, and often receives support advertising, pooled purchasing, world-wide information networks, etc. However, the franchisee must pay significant fees to the franchisor and must follow the policies, procedures, and quality standards set by the franchise. Non-compliance entails loss of the franchise. Obviously, these constraints may limit the strategic and tactical options of the SMEs. (See Section 3.2 for more information on franchising.)

#### **1.7.4 Licensing technology**

Innovative SMEs in industrializing countries can maintain a high degree of independence by licensing technology from established companies in industrialized countries. In practice, the licensing agreement allows the licensee to utilize the patents of the licensor for a royalty fee. However, the information disclosed in the patent is usually insufficient to develop products, processes or services, particularly if the licensee has limited R&D and engineering facilities. For a higher fee, the licensee can also obtain the practical know-how needed for implementation and also receive training and start-up assistance.

Normally, licenses are granted on a non-exclusive basis, but exclusivity for a specific geographic area can be obtained for a limited time period. The licensor may also require cross-licensing, that is free utilization of improvements to the patent made by the licensee. Since royalties are based on sales, the licensor may also require access to the licensee's facilities and inspection of financial records. The licensor usually requires a down payment of "earnest money" at the signing of the agreement and royalties based on sales, following a decreasing scale. The licensee should obtain access to the licensor's facilities for training and exchange of technical information, and free utilization of improvements made to the patent during the life of the contract.

#### **1.7.5 Spin-offs**

The spin-off phenomenon originated in the United States after the Second World War and became the driving force for the creation of the first technopolises: Route 128 near Boston and Silicon Valley. This model has been replicated in developed countries (Cambridge in the United Kingdom, Sophia Antipolis in France, more recent technology parks in Sweden, Finland and Japan), but implementation has been slow in many developing countries in spite of high government expenditures.

In the United States, there have been three phases.

Phase 1 (1946-55) is characterized by spin-offs from universities (especially MIT) and defense laboratories in the Boston area. The researchers who had contributed to the war effort, from radar to atomic weapons, wanted to apply these new technologies to civilian uses, in order to develop new products and improve the quality of life. They were technological entrepreneurs who left their laboratories to

create new ventures. Many were successful and created wealth for themselves, their employees and their suppliers.

Phase 2 (1955-76) is characterized by spin-offs from established companies. Having witnessed the success of the first phase companies, many entrepreneurial employees of established companies wanted to develop new products based on technological innovations, beyond the product lines designed, manufactured and marketed by their companies. For a variety of reasons, from bureaucratic inertia to fear of risk-taking, these employees encountered strong resistance from their companies and decided to leave and start their own new ventures. In turn, the companies which were spun-off created their own second generation spin-offs and so on. Silicon Valley originated from companies that were attracted to the Stanford University Technology Park and from their many generations of spin-offs.

Phase 3 (1975-2000) is characterized by spin-offs encouraged by local economic incentives. Many regions and cities in the United States were suffering from the post-war transformation of the economy and the industrial recessions caused by strong foreign competition. State and municipal economic development agencies tried to replicate the “miracles” of Route 128 and Silicon Valley with mixed results. At the state level, a typical example is North Carolina’s Raleigh-Durham technology park, now employing 25,000. The state government invested more than \$5 billion over 10 years to build the infrastructure of this park, train surplus agricultural workers to work in factories, and provide fiscal incentives to new ventures and established companies willing to locate there.

Spin-offs have also been encouraged, indeed mandated, by large government - owned and some private companies with redundant personnel. For instance, in Eastern Europe newly privatized companies assisted their employees to start companies utilizing the technology and skills of the parent company. Most of these initiatives failed for lack of entrepreneurial spirit, inadequate market research, poor management skills and deficient infrastructure. Few spin-offs have occurred in developing countries, including the Maghreb, because university research is more theoretical than applied, and because established companies may discourage their employees from leaving. Nonetheless, with the newly created infrastructure, including incubators and technology parks, entrepreneurs will want to start their own companies and may be encouraged by government and private incentives, such as emerging venture capital. Other spin-offs may originate from researchers who have studied abroad and returned home to start their own companies, as in Taiwan. (See section 1.8, “Karim Skik and Equinoxes.”)

One sticking point in these spin-offs is the question of intellectual property and other company confidential information. (See Chapter 5.) To avoid unpleasant and costly litigation, this matter should be discussed and resolved before the spin-off takes place. For instance, if RPI owns the intellectual property, it will grant non-exclusive licenses to the spin-off company, with royalties to be paid after the company has obtained revenue from sales of the licensed products.

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### 1.7.6 Independent new ventures

In summary, entrepreneurs in the Maghreb have many options for developing their businesses in partnership with established companies, cognizant of their industry and markets. However, the creation of an *independent venture*, wholly or majority-owned by the entrepreneurs, is the most direct and effective way to create wealth for themselves, their companies and employees, as well as their country or region.

This is demonstrated in Table 6, which compares the advantages and disadvantages of the six modalities described above as they apply to entrepreneurs in developing countries, including the Maghreb. The following evaluation criteria are applied, utilizing a five-level scale: 5 = very high; 4 = high; 3 = medium; 2 = low; 1 = very low for the criteria marked \*, and an inverted scale: 1 = very high to 5 = very low for the criteria marked \*\*.

The relative importance of each criterion will depend on the specific situation in each country and the subjective opinion of the entrepreneurs. Nonetheless, we have assigned weights to each criterion according to our experience in developed and developing countries and discussion with local entrepreneurs. The evaluation criteria can be briefly described as follows.

The first five criteria are *objective*:

1. Payoff (if the project is successful)\*
2. Probability of success\*
3. Time to payoff\*\*
4. Investment by the entrepreneur\*\*
5. Availability of outside financing (banks, business angels, venture capital, government grants, etc.)\*

The next three criteria are more subjective and psychological and represent measures of satisfaction for the entrepreneur:

6. Autonomy of the entrepreneurs\*
7. Recognition of the entrepreneurs by the community\*
8. Work intensity and stress\*\*

The last criterion attempts to measure the economic and social contribution of the entrepreneurs:

9. Contribution to economic development\*

The overall evaluation is the weighted sum of all criteria on a scale from 5 (maximum) to 1 (minimum).

It can be seen that new ventures have the highest ranking (3.8 or 76%), followed by spin-offs and joint ventures (3.3 or 66% each). Licensing follows (3.1 or 62%), then acquisitions and mergers (2.9 or 58%) due to the relatively low probability of success and lastly, franchising (2.8 or 56%) due to the relatively low payoff. It is interesting to note that all modalities obtained evaluations higher than 50%, signifying that all are possible for the Maghreb. The final choice, we emphasize again, will depend on the specific situation in the country at the time of the project and on the motivations and psychological characteristics of the entrepreneurs.

Evaluation Criteria	Weight	Acquisitions and mergers	Joint ventures	Franchising	Licensing	Spin-offs	New ventures
Payoff (if successful)*	30%	4	3	1	3	3	5
Probability of success*	20%	2	4	5	4	4	3
Time to payoff**	5%	4	3	5	3	2	1
Investment (by entrepreneurs)**	10%	2	3	4	4	3	4
Outside financing available*	10%	2	3	4	1	3	2
Autonomy of entrepreneurs*	5%	3	3	2	4	4	5
Recognition of entrepreneur*	5%	3	3	1	2	4	5
Work intensity and stress**	5%	2	3	4	3	2	1
Contribution to economic development*	10%	3	4	1	3	4	5
Overall evaluation*	100%	2.9	3.3	2.8	3.1	3.3	3.8

\*Scale: 5 = High to 1 = Low

\*\*Scale: 1 = High to 5 = Low

## 1.8 Case study: Karim Skik-Equinoxes

### 1.8.1 Summary

The case study “Karim Skik–Equinoxes” is of great interest for entrepreneurs or aspiring entrepreneurs in the Maghreb because it tells the story of the apprenticeship, hard work, and business and financial success of a 40-year-old Tunisian entrepreneur, Karim Skik. Skik is the founder and managing director of the MAE group, which specializes in information engineering, the Internet and software programming, with sales in 2007 of 5 million Tunisian dinars, the equivalent of \$4 million. Thirty percent of the revenue is from international clients outside the Tunisian market.

Like many smart young Tunisians, Skik graduated from HEC in Carthage, the leading business school in the Maghreb, and then transferred to HEC in Montreal, Canada, where he obtained a master’s degree in finance. He then went to work for a major bank in New York and was promoted to manager and sent to their subsidiary in Milan, Italy, to install and manage the trading room.

While working at the bank, Skik saw the emerging opportunities of the Internet and the worldwide web. In response, after 17 years of “apprenticeship,” he started his own company, specializing in the Web and networks. At the same time, with his associate and friend Jacem Hlioui he created “Bab el Web,” a Tunisian portal to serve the local community of Internet users.

In 2001 Skik and Jacem returned to Tunisia for two main reasons. First, they felt a sense of patriotic duty and gratitude toward the country where they were born. Secondly, the Tunisian IT environment and market seemed chaotic and unready to develop such a project, and thus, they would have no competition.

Skik and Jacem created the MAE Group as two companies: Equinoxes for software programming and Eventis for Web-based travel reservations and business meetings. Later, with a Portuguese associate, they founded Cyborg, which concentrated on software programs for human relations and payrolls. A true entrepreneur, Skik harvests the companies he created, raises capital and continues to start new businesses. He has sold 51% of Equinoxes to a large French networking group, with an option to acquire the balance within three years.

Despite his feverish work schedule, Skik does not neglect his family. He remains close to his wife, and every Wednesday he plays sports with his children, to whom he would like to pass on his dream of developing his Internet company, having an IPO and being listed on NASDAQ.

### 1.8.2. Pursuing both a business and a dream

The 12 years that Karim Skik, founder and manager of the MAE group, spent in the United States developed his ability to manage large projects. He acquired the American business mentality whereby a new project is allowed to expand and

succeed before another business is undertaken that can benefit from the value created from the sale of the first project. This process requires a pragmatic management approach based on innovation, the motivation of workers and a systematic search for opportunities. During these 12 years Skik overcame the challenges he encountered in a new field and in a new country, thanks to “an unflinching belief in providence” that “gradually led him to success.” He successfully converted his area of expertise from finance and trading to computer programming and the Internet. “I never thought of delving one day into the area of software. With my financial background, I never pretended to be an expert in software, information technology and communication technologies. But I have always admired that particular domain, the communication networks and the connections between the financial markets. At first I was interested in the contents and then in the container, the connection networks around the world.” His journey was marked by unexpected events, setbacks, flashes of inspiration and constant learning.

After obtaining his diploma at IHEC Carthage in 1990, Skik received a master’s degree in Montreal, followed by a job at the Republic Bank of New York. He gained experience in financial trading and in 1992 became interested in computer networks. A workaholic, Skik attracted the attention of his employers. When the bank was “re-engineered,” he became familiar with financial processes and got a closer look at the inner workings of the bank. He obtained a management position after competing with 56 other candidates.

His interest in computer networks prompted his boss to propose that Skik move to Milan to set up and manage trading. He accepted for several reasons. “First, I wanted a change of culture and to discover Europe. My experience made it possible for me to be connected to operators throughout the whole world. And it was also possible for me to get a good financial basis to start my own project. It was a most rewarding experience as I was able to buy and sell different currencies depending on the turn of political events in the world. That is when I discovered the world of communication technologies.”

### **1.8.3 Bab el Web, the first stepping stone**

Although he comes from a socialist intellectual background, Skik firmly believes in the entrepreneurial spirit and individual effort. He sees personal enterprise in the framework of capitalism as a path to “value and comfort for those making the effort.” This explains his decision to resign from the American bank after finishing his mission in Milan. He participated in the launch of “orientation.com,” a start-up specializing in the Internet and computer networks. Over \$40 million was raised for this successful project. A concatenation of events ensued. In 1997 Skik began the “Bab el Web,” a Tunisian portal that was designed to provide basic Internet service for the local community. During this project he got to know Jacem Hlioui, who became his associate in future projects. “We set up and developed Bab el Web out of patriotism, to bring attention to our country. Jacem added his skill to the design of the site and its contents. We were in contact with Internet users

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throughout the world, and this is one factor that explains its success.” At that time Bab el Web was competing with other portals like Voilà. The design of Bab el Web was original: to provide services like a newsletter where the contents were customized to the needs of the country. Skik and Jacem did not stop at Bab el Web. After another company they started, “orientation.com,” was sold to “about.com” in 2000, the two friends took some time to decide on their next steps. “Jacem and I had an original vision about software programming. The manual input of the programming code had to be done away with and an automatic code had to be designed. That is not an easy task and takes a lot of time and resources. Our aim was to create a workshop which could come up with any sort of application without having to resort to the manual input of the code.”

Why did they choose to build their companies in Tunisia? Skik gives two reasons: “First to repay our debt to the country, which made it possible for us to learn and to grow. Secondly at that time [2001], the Tunisian market was mediocre and even chaotic and not ready for such a project. There were no competitors, and it was only natural that something would come up.” Equinoxes, founded in 2001, was the crystallization of this approach to software programming. Skik’s next company, Eventis, confirmed his success. Eventis was a reservation center that successfully managed the welcome and care of the over 15,000 delegates attending the world summit of the Information Society in Tunis in November 2005. At this event, Equinoxes received the Summit award for the “Webtelegramme,” a software solution it had designed for the Tunisian post office.

#### **1.8.4. Global approach**

The MAE group comprises several companies, each representing a strategic business. Equinoxes is the primary company, specializing in software engineering and the Internet. Within Equinoxes is Cyborg, a joint venture with a Portuguese associate. Cyborg develops human relations resources and payroll management software. Eventis specializes in event management and Internet sales. The group also includes an imaging company and a digital sound system company as well as WebGenetics, a software company. Skik hopes to make WebGenetics the spearhead of his group of companies.

Among MAE’s shareholders is a “business angel,” a Dutch venture capital investor with a 20% share of the capital. MAE is working on “new businesses for the Tunisian context, but not all are innovative compared with the international context,” according to Skik. He is proud of his Tunisian heritage but does not hide his enthusiasm for the international market. “The group’s final target is to devote 100% of its efforts to the international market by selling our various services to non-resident outlets.” At present, the group’s market activities are 30% international and 70% Tunisian. The international dimension is enhanced by the fact that Keyrus, a French giant in information systems and telecommunications, bought 51% of the capital of Equinoxes, with the option of buying the balance in three years. This sale caused quite a stir in the Tunisian market.

This alliance with an international company further opens the doors to internationalization. Skik notes that this successful sale took a lot of time to accomplish. “I have always believed in it. My business philosophy is simple. I strive for a business, I get it and then I look for all the factors of success. It’s like raising a child. You see him growing up and succeeding and then comes the time when you must let him go. For me entrepreneurship means a strong will for independence and temporary ownership and a strong will to let go at the right time. A successful business means working at it, and there comes a time when it must be ceded and then you capitalize on the added value and start another business. We managed to convince Keyrus of the soundness of our project and its medium- and long-term profitability. A few years ago no one would have believed this. This alliance will make it possible for Equinoxes to improve the quality of its services and to gain access to other markets.” What about the value of the transaction? Skik had established a value indexed on the classical performance indicators such as the profitability level, turnover, output of human resources etc. But at the same time he has an approximate value in mind, and “a sum had to be envisaged which would do justice to the company.”

### **1.8.5. Key factors of success**

The success of Karim Skik and his MAE group corresponds in general to a series of technical, human and functional factors.

*A detailed business plan.* Skik says he opted for a very detailed business plan for the three-year period which covers the operating budget with staff costs (50 senior staff at present), investments for equipment, marketing, sales and cash flow.

*A marketing policy targeted at a specific clientele.* Skik says that his marketing policy has changed over time. At first, when MAE wanted to attract new clients and make itself known as a new operator (2001–2002), its prices were more moderate. But once the quality of its services was known and it had become a leader in its domain, MAE increased its prices while targeting a clientele of big companies that could afford them. “There is no publicity for the services we provide since we do not need it for the moment. Perhaps when we reach the stage of maximizing our business we might undertake some promotional publicity.” As for distribution, MAE mainly asks third parties for bids.

*Loyalty and business ethics.* Skik is one of those managers who believes in business ethics as a means of development and survival. He also believes in a divine Providence that watches over the world. His success can also be explained by personal elements outside the business that influence the profitability of a given project. Influenced by both his personal ambition and a more socialistic philosophy, Karim says that ethical management is his credo. “Every half-year I disclosed the actual performance of Equinoxes. I paid all my taxes despite huge financial problems. This made it possible for me to enhance the Equinoxes offer during the negotiations with Keyrus. Our transparency was most useful to us.” As

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for loyalty, this can be seen in Skik's attitude towards the "business angel" who originally financed him. He was given priority in the financing of new companies. Another personal factor was perseverance. Equinoxes' painful results early on did not discourage Skik and his collaborators. They believed in the company during good times and bad. "You must believe in your lucky star and everyone should do everything to turn the project into a success."

### 1.8.6. The family, the dream and the future

Karim Skik is always in pursuit of learning and freedom. In 2004 he left his position as director general of Microsoft Tunisie. He explains: "Working at Microsoft and having access to Bill Gates and Steve Ballmer is quite fantastic and is not something that happens every day. I was the branch director in Tunisia for eight months. They wanted me full time and this meant that I could not set up my own project so I decided to leave. But this short stay at one of the best producers of software in the world made it possible for me to learn a lot." He is proud of the company's success. "At the beginning Jacem and I were skeptical about setting up in Tunisia because software, the Internet and computer networks entail risk-taking. Tunisian banks unfortunately were not helpful. The judicial system in Tunisia is still restraining as far as innovation and information technology are concerned. So you want to know why we were successful? Because of Providence, our character and our perseverance." Skik also believes that meeting his wife and sharing his dreams with her helped him soar so high. "I owe a lot to my wife. She is always at my side and I like having a family. At home, I can do my work and watch over my children. Every Wednesday I play sports with my children. Living in the comfort of your family is always for the best." Skik continues to dream. "I would like to pass the dream on to future generations. That's my life philosophy." Skik has three dreams: to optimize the 49% divestiture option of the Equinoxes capital, to improve the performance of Bab el Web and WebGenetics and, his greatest dream, to have his companies listed on NASDAQ.

### 1.8.7. Key dates

- 1990:** Skik obtained his HEC Carthage diploma and went to Montreal to continue with a master's degree in finance.
- 1992:** He worked at the American "Republic Bank of New York" and gained experience in trading.
- 1994:** He went to Milan to set up the trading floor for the American bank.
- 1997:** He launched "orientation.com," a start-up specializing in the Web and networks. He and Jacem Hlioui also managed a Tunisian portal, the Bab el Web.
- 2000:** He sold "orientation.com" to the American site "about.com."

**2001:** Skik and Jacem returned to Tunisia and founded the MAE group, made up of Equinoxes, Eventis and Cyborg.

**2005:** Eventis managed the reservations and welcome of delegates to the World Summit of the Information Society, where Equinoxes was awarded the Summit prize.

**2006:** Keyrus, a French group, bought 51% of Equinoxes capital, with the option of buying the balance over three years.

### **1.8.8 Lessons learned and conclusions**

Several important lessons can be learned by Maghreb entrepreneurs when studying this case.

1. Entrepreneurs in the Maghreb can be just as smart, creative, hard-working and visionary as their colleagues in developed nations.
  2. The quality of knowledge offered by leading universities in Tunisia is equivalent to that of Western nations.
  3. Aspiring entrepreneurs from the Maghreb with good academic records can be admitted to top business schools anywhere in the world and then find employment in international corporations.
  4. Work in Western countries should be considered as an “apprenticeship” for obtaining practical knowledge for creating new ventures in the Maghreb.
  5. Once the apprenticeship is complete, entrepreneurs should resist the temptation to accept well-paid positions working for multinationals in their country, because this would distract them from their main goal: creating and owning their own companies.
  6. Venture capital may be difficult to raise in Maghreb, but a promising new venture can obtain funds from Western sources.
  7. While a new venture may first target the limited local market, it should always be driven by a global vision, since opportunities are ultimately worldwide.
  8. Following the culture of the Maghreb, entrepreneurs should be sustained by a strong belief in free enterprise, their values and business ethics.
  9. Again, following the Islamic tradition and culture, Maghreb entrepreneurs should seek balance in their lives, giving equal weight to business, family and community life.
  10. Entrepreneurs should measure success according to three dimensions: First their own satisfaction and financial rewards; second, business success for their companies and associates; and third, their contributions to regional economic development, high-value-added job creation and globalization.
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# CHAPTER 2: NEW VENTURE CREATION AND CRITICAL SUCCESS FACTORS

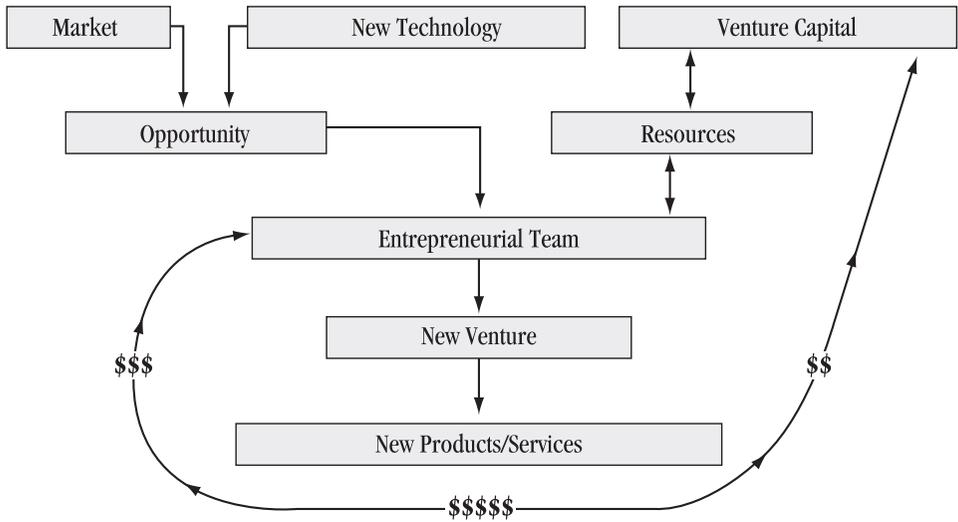
## 2.1 The process of new venture creation

The process of new venture creation is shown in Figure 2. The process starts with the recognition of an opportunity by an entrepreneur or an entrepreneurial team. The opportunity is a *creative combination* of an existing or potential market need with new means for satisfying that market. For instance, one as yet unfilled opportunity for an existing market is the development of a battery, or fuel cell, of the same size, cost and weight as an existing automobile battery, but with three times the energy density. Such a battery would open the \$10 billion market for electric cars. However, in spite of heavy public and private R&D expenditures, such a battery is not yet available. On the other hand, Steve Wozniak and Steve Jobs saw the potential market for personal computers, but were unable to persuade their employers, Hewlett-Packard and Atari, to enter this market. They created Apple and are now billionaires, whereas many companies, including IBM and DEC relied too heavily on main frames and minicomputers and did not envision in time the inevitable shift to PCs and microprocessors.

In the Maghreb, an obvious potential market is local production for the Maghreb-wide market to push out imports, while a potential untapped market may be improved irrigation methods, water conservation and recycling of gray water for agricultural proposes.

Once the entrepreneurial team has conceived of one or more new possible approaches to meet the market needs, they need resources to develop the technology, prove feasibility by building and testing prototypes, engineer and manufacture the product, train the sales force, advertise and launch the product or service. In most cases, these resources will have to be raised from investors, such as family and friends, business angels and venture capitalists. The business plan is the best generally accepted vehicle for obtaining these resources, usually in funding steps based upon milestones in the plan. With these resources, the entrepreneurial team creates and builds the new venture, develops and markets their new products and services. If these are successful financially, a stream of profits will flow from the venture. A major portion of these profits will be reinvested in the venture, in order to foster rapid growth and preempt competition. Another portion will go to the entrepreneurs themselves as a reward for their efforts, and one portion to the capitalists who have taken the risks of investing in the new enterprise and assisting the entrepreneurs. It should be noted that private investors are interested in high returns commensurate with the risks assumed, as an alternate to other less remunerative but also less risky investment alternatives. In contrast, public sources of funds are often subsidies or grants, and their main purpose is to promote technological development and job creation, rather than to make money, but always controlling risk.

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**Figure 2. The process of new venture creation**

From the above description of the process, it is clear that there are three main elements of a new venture: the entrepreneur(s) E, the opportunity O, and the resources R. Therefore the potential of a venture can be expressed by the simple formula:

$$\text{VENTURE POTENTIAL} = E \times O \times R$$

where:

E = the quality and relevant experience of the lead entrepreneur(s) and team;

O = the quality and durability of the opportunity;

R = the commitment of adequate required resources.

Elementary mathematics leads to the following two conclusions:

1. To maximize the venture potential, all three elements—entrepreneurs, opportunity and resources—must be maximized.
2. If one of the three elements is zero, the potential of the venture is also zero.

The second conclusion explains the three reasons for the failure of many ventures.

- Large companies have plenty of opportunities and resources, but are often staffed with bureaucrats, not entrepreneurs. For instance, Exxon lost \$2 billion in the 1970s trying to develop the “office of the future” by acquiring small companies and replacing their entrepreneurs with Exxon administrators.
- Some entrepreneurs with sufficient resources attack the wrong opportunities at the wrong time. For instance the CEO of Polaroid, Edwin Land, created

Polarvision, a film for instant cinematography for which there was little demand. In addition, the market window was closed by the advent of videotape.

- Finally, particularly in developing countries, there are plenty of opportunities and potential entrepreneurs, but the technical and financial resources maybe lacking, and thus many entrepreneurs give up or move to developed countries.

Each of the three main elements presented above affects the success of a new venture.

## 2.2 Key elements of new venture creation

### 2.2.1 The entrepreneurs

The characteristics of business people may be classified according to two orthogonal dimensions, as shown in Figure 3: the level of creativity and innovation, high or low; and the level of management skills, low or high. There are four possible combinations of these dimensions, which can be described as follows:

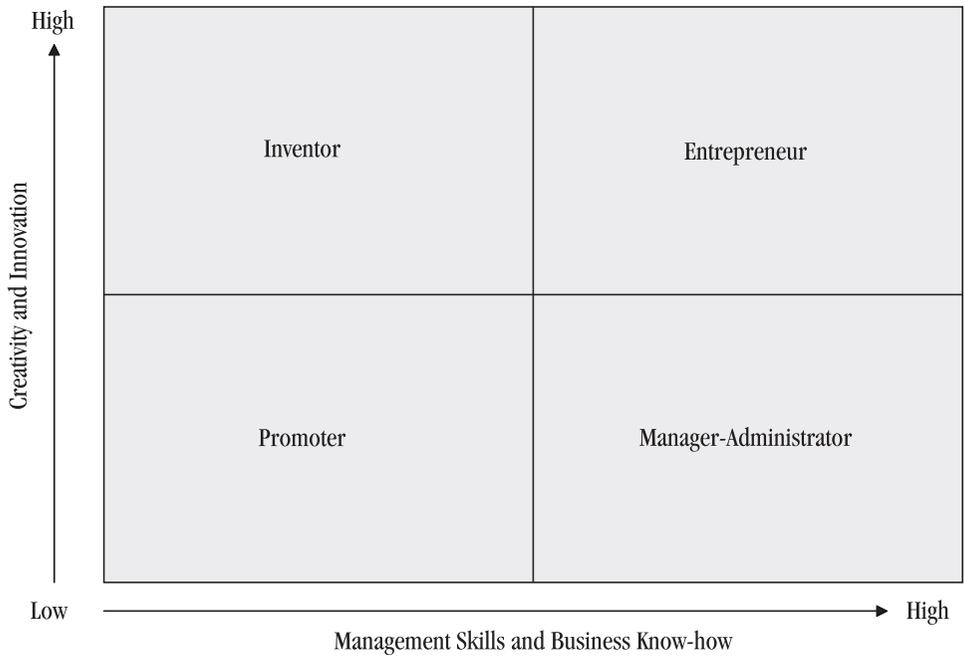
- (1) An *inventor* has a high level of creativity and innovation, but a low level of management skills, either because of lack of personal interest or lack of education and experience. Inventors are full of ideas that are exploited by others.
- (2) A *manager-administrator* has a high level of management skills and business know-how, but a low level of creativity or innovation due to lack of intellectual capacity or a lack of motivation when working in a bureaucratic environment. Manager-administrators are good at running a viable business in a stable environment.
- (3) An *entrepreneur* has creativity and innovation and also management skills and business know-how, and is thus able to create and develop a business in a turbulent environment.
- (4) Finally, a *promoter* lacks any kind of skills and is only able to entice unsuspecting and naïve investors into highly questionable undertakings.

With the help of this simple matrix, we can try to answer the question: Are entrepreneurs born or made? Creativity and innovation are unevenly distributed among mankind, just like a good singing voice and a musical ear. But even with these natural gifts, it takes hard work and plenty of application and practice to become an opera star. Similarly, entrepreneurs are endowed with a high level of creativity and innovation, but need to develop these characteristics and acquire the necessary management skills and know-how by attending business courses and by actual practice and experience in the field, preferably in high-growth innovative companies.

The following are the salient characteristics of a typical entrepreneur.

1. *Intrinsic motivation.* (This explains why some family businesses cannot be transmitted from entrepreneur to children, who might lack motivation.)
  2. *High need for achievement, low need for power and a variable level of need for affiliation.* Entrepreneurs see their venture as the means for achieving their vision, rather than for acquiring power over employees and partners. Some entrepreneurs are charming and affable, while others are not socially minded and difficult to approach.
  3. *Money is seen as a reward for achievement,* rather than the main goal for creating a company.
  4. *High energy level,* often working long hours for “sweat equity” without any material rewards.
  5. *Internal locus of control,* that is, confidence that obstacles can be overcome, even in a hostile or difficult environment.
  6. *Ability to inspire others to share the entrepreneurial vision* and contribute directly or indirectly to the venture through funds, assistance in kind, advice, etc. In the Maghreb, well-established, pervasive “social networks” can be leveraged for this purpose.
  7. *Ability to assume and control risks,* rather than gamble.
  8. *Lack of fear of failing* and the realization that failure can be translated into a learning experience. Many entrepreneurs in Western countries succeed after failing once or even twice. However, in the Maghreb, failures may reflect negatively on the entrepreneur and his/her family and may prevent the entrepreneur from trying again for a “second chance.”
  9. *Creation of needs* after unsuccessful market research, as Wozniak and Jobs were able to do for the first PC’s.
  10. Finally, entrepreneurs strive to please first themselves by fulfilling first their need for achievement, second the customer, and third one or more sponsors who will advise, encourage and protect them during the difficult process of new venture creation.
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**Figure 3. Characteristics of inventors, entrepreneurs, manager-administrators and promoters**



Obviously, not all potential entrepreneurs possess all these characteristics since many are innate, but others can be developed through motivation, coaching and hard work. Even if endowed with these characteristics, not all potential entrepreneurs actually become active entrepreneurs. In order to make this transition two conditions need to be satisfied:

1. Entrepreneurs must have the confidence that they have the ability to start a new venture. When young, the entrepreneur may feel that he/she does not have enough knowledge and experience and therefore needs to go through a period of apprenticeship. As soon as the entrepreneur feels confident, the “*decision window*” opens up, and he/she feels ready to start a company. However, the decision window does not stay open forever. As the entrepreneur grows older, starts a family, enters into financial obligations such as home mortgages, he/she may be less willing to take the risk of bankruptcy and the “*decision window*” closes because of lack of interest and energy.
2. During the period when the “*decision window*” is open, a *precipitating event* is often required to force the potential entrepreneur’s decision to start a company or join a start-up firm. This event can be either *negative*—such as dissatisfaction with the present job, conflicts with superiors, transfer or dismissal, personal or family problems—or *positive*—such as the emergence of a technical or market opportunity, examples from successful peers, offers from friends to join their company, availability of funds (liquidation, inheritance) etc. In the United States

the negative precipitating events are more frequent, whereas in Europe positive events tend to be more common. In the Maghreb, most precipitating events will be positive, such as the encouragement and support of relatives and friends.

### 2.2.2 Networking

When they start a company, entrepreneurs have limited resources (money, space, advisors, services, etc.). Therefore, entrepreneurs show great ability to augment and leverage their resources through networking. Informal networking takes place through family, friends, friends of friends and business associates and is common in the Maghreb. In some locations there are local banks, business development councils, branches of chambers of commerce, central banks and government agencies that assist entrepreneurs.

In the American case, more formal networking takes place regularly (once a week to once a month, usually for breakfast) through clubs of entrepreneurs, for instance in Silicon Valley, Route 128, and VARPI (Venture Affiliates of RPI). In addition to entrepreneurs, bankers, venture capitalists, accountants, attorneys, job seekers, and even some academics attend these meetings. Attendees have one or two minutes to introduce themselves, communicate news, or make a request, for instance to find a programmer specializing in the “C” language. At the end of the meeting, connections are made and business cards exchanged, which may lead to a business transaction. In addition, banks and venture capitalists have wide business networks, which they utilize on behalf of their clients. In the Maghreb, this type of formal networking is not yet fully effective, but could be strongly enhanced by informal networking through the “social network.”

### 2.2.3 The opportunity

An opportunity is a creative combination of an existing or potential market need with a new technical or organizational solution for satisfying that market. Following are the qualities of opportunities that, with hard work, may be translated into a successful new venture.

1. An opportunity should be *attractive* to the entrepreneurs, the investors and, of course, the customers. It should be durable, not a fad like “pet rocks” or miniskirts, subject to the vagaries of fashion. It should be *timely*, that is in line with market, economic and environmental trends. For instance, a Canadian venture developed an innovative and safe method for preserving potatoes through the winter through low-level  $\delta$  radiation. Unfortunately, the nuclear scare caused by accidents in U.S. and Soviet plants killed the project.
  2. The opportunity is not just an idea. To succeed, the idea must be anchored in a product or service which creates or adds value for its buyer and/or the end user.
  3. The most successful entrepreneurs and investors are *opportunity focused*. They start with the customer and they never lose sight of this throughout the development of the product or service.
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4. The *targeted market* must be attractive. *First*, it should be of large size, not a small niche. The reason is that most entrepreneurs overestimate the market share they will be able to achieve. Thus, a small share of a large market will still be more attractive than a larger share of a niche market. (We would rather have a quarter of a family -size pizza than half of a mini pizza!) *Second*, the market growth rate should be relatively high, 10% or more per year. The reason is that the new venture will capture market share from the incumbent competitors. If the market is growing fast, competitors' sales will still increase, and they will not be overly concerned. If the market is flat or declining, competitors' sales will decrease and they will retaliate by product enhancements, market development, and price cuts, perhaps even starting a price war. *Third*, the leading customers must be innovative, ready to act and adopt the innovation. For instance, an RPI incubator company developed a \$500,000 superconducting magnetic ore separator for the copper mining industry. The copper companies were in terrible financial shape after a lengthy strike, all equipment purchases above \$50,000 had to be approved by the board of directors, and the purchasing cycle was 16 months! As a result, only one unit was sold, to a U.S. government agency.
5. The *window of opportunity* must be open for a sufficiently long time to develop and sell the product and to make enough profits to reward the investors.
6. Finally, the entrepreneurial *management team* must have the ability and experience necessary for developing the technology and market.
7. The opportunity must be such that, after market entry, the company can achieve and maintain their competitive advantage by erecting *entry barriers* (proprietary technology, patents and trademarks, market connections, unique manufacturing processes) against competition. For instance, one RPI company successfully developed a remote control system for orienting dishes to capture satellite TV signals. This device was not protected by patents. After six months, Taiwanese companies were selling in the United States a similar product at a lower price than the U.S. company's manufacturing cost!
8. The opportunity must have significant growth and *profit potential*, in order to attract investors. Thus, small "mom and pop" businesses or lifestyle companies (e.g., fashion boutiques, small consulting firms) are not attractive.
9. Opportunities in the Maghreb will be described below in greater detail (see Chapter 3).

## 2.2.4 Resources: informal and formal venture capital

Most starting entrepreneurs do not have sufficient assets to qualify as collateral for bank loans. Also, given the risks inherent in high ventures, they would be foolish to mortgage their homes or family assets. Therefore, most entrepreneurs raise money through equity, tapping informal and informal sources of venture capital.

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The principal informal source is personal savings, funds from family, friends and business associates. A semi-formal source is “business angels,” wealthy individuals who usually prefer to invest within the community. In the United States, the amount of capital thus informally invested is estimated to be in excess of \$100 billion, maybe twice the amount of formal venture capital.

In contrast, the U.S. venture capital industry had approximately \$30 billion total invested in 2008, and on the average, invests \$20 billion per year. There are also significant venture capital industries in the United Kingdom, Switzerland, Sweden, France, Italy, Japan and other countries. The following are some salient characteristics of the U.S. venture capital industry, which started in Boston more than 50 years ago.

1. Venture capitalists *participate actively* in the management of companies where they invest, usually through a seat on the board of directors, with regular meetings with the CEO and officers. However, they do not normally interfere in day-to-day operations. This is in contrast to banks, which normally only monitor their investments and only take action in case of late interest payments or defaults.
  2. The “Guide to U.S. Venture Capital” lists approximately 700 venture capital sources, by location, technologies, industries, types and stages of investment, etc. This helps entrepreneurs select the most appropriate source of capital for their company.
  3. Venture capitalists are *highly selective*. They may receive in one year 300 or more business plans, but they fund only 1 to 3%. Thanks to this careful selection, they are able to develop a diversified portfolio of investments, where the successful investments not only pay for themselves, but also for the unsuccessful ones. Typical statistics show that 10% of investments are outstanding successes, such as Apple, Microsoft, Intel; 30% yield a return on investment (ROI) of 30-50% per year, which is normal for most venture capitalists; 20% yield a ROI of 10-30% per year; and 15% fail and are a total loss. The main problems are the remaining 25% that achieve marginal and unstable returns (or losses) and seem to go nowhere, the so-called “living dead” or “walking wounded.” These investments take an excessive amount of time, the venture capitalist’s scarcest resource. Therefore, a recovery plan will be formulated, the entrepreneurs may be replaced by professionals, or the venture will simply be killed by denying additional funds. Typically, the harvest will take place five to seven years after the investment through sale or merger of the successful company, or an initial public offering in the stock market, or a leveraged buyout by the entrepreneurs and management (see Chapter 9).
  4. Venture capitalists utilize fairly sophisticated methods for evaluating business plans, but the basic principles are fairly simple. Similar, simplified decision criteria are utilized by business angels. First, the *business plan* must be *complete* and *professionally prepared*, or else it will be rejected. Thus, a check list of all
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pertinent items to be covered in the plan (for instance patentability) is very useful. Also, the financial sections must follow standard accounting practices and should be reviewed by a certified professional. Second, the *market* and the opportunity must be *attractive* and the competition weak or fragmented in the market segments selected. Third, *technical feasibility* should be *achievable* within the time and financial limits of the business plan. Fourth, and this is by far the most important factor, the *management team* must be complete (at least one technical, one marketing and one business person), totally committed (no part-time entrepreneurs!) and should include at least one *experienced business person*. The members of the management team should have a previous record of achievement, not necessarily as entrepreneurs, but in their specialties, for instance, R&D in universities or laboratories for the technical manager.

## 2.3 Critical factors for success

To summarize, entrepreneurial ventures, in order to succeed, must create something new and creative, such as a new product or service (like the heart monitor for athletes developed by the Finnish company PolarElectro), a new marketing strategy (like direct sales of PC's by Dell computers with 24-hour service), or a new way to deliver a service (like making available information from the Internet by Google without charge to the user).

As the new venture develops, the entrepreneurs have to gradually evolve from entrepreneurs to *entrepreneurial managers*, who can lead and manage the expanding company in an uncertain and rapidly changing environment. This explains why many new ventures, particularly in Silicon Valley, change their CEOs after a few years. The founders-entrepreneurs are unable or uninterested in making the transition to entrepreneurial managers with administrative duties. They are replaced by professional managers, and may stay on as consultants or move out to start new companies with their share of the earnings.

The following summarizes the critical factors for success in new ventures based on technological innovations according to field experience in managing high-tech innovative projects.

1. The probability of business (not technical) failure of a technological innovation is about two thirds. Therefore, in order to escape from this ironclad law of statistics, the new venture must possess a *unique advantage* not available to competitors, such as a patent, a customer ready for adoption, available production and distribution facilities, deep pockets, etc.
2. During the entire period of new venture creation, there must be constant, *direct coupling with the marketplace*, that is, prospective customers and users. Their feedback must be received and incorporated into the product or service either informally or formally (through focus groups, beta tests, etc.).

3. A *product champion* or sponsor is required, with enough authority to convince skeptics and overcome resistance of bureaucrats. The lead entrepreneur, if of sufficient stature in the industry, may assume this role, otherwise an investor or advisor should take the initiative.
4. Technology *gatekeepers* assist in selecting the most appropriate core and supporting technologies to fulfill the specifications.
5. The ideal *entrepreneurial team* encompasses three distinct roles: an inventor who conceives and realizes the product, a market developer who sells it, and a business manager who makes sure there are no over-commitments and that scarce resources are carefully utilized. Also, a three-person team is more creative than a two-person team and more efficient than a team of four or more.
6. If the venture is part of a larger organization (corporation, university, R&D laboratory), *higher management* involvement and support is highly desirable, or, at a minimum, benign neglect.
7. *Openness and communication channels* within the team, with the investors, the customers, and all sources of information and advice are essential.
8. *Luck* is a very important factor that can favor or kill any new venture. However, Pasteur, the great inventor and innovator, stated “chance favors the prepared mind”. In other words, those who have done their homework will recognize and seize the opportunity, whereas others will let it slip by.

As a counterpart to the key success factors discussed above, the most frequent reasons for failure of a new venture can also be summarized.

1. Insufficient *cash flow* (not profit or loss). Cash is king, it must be carefully safeguarded!
  2. Insufficient *sales volume*, usually due to overestimation of the market and underestimation of competition.
  3. *Lack of focus* on the core of the business, too many distractions, waste of scarce resources, lack of concentration on the main goal.
  4. Wrong *strategic thrust* for the specific market and industry, usually an inadequate entry strategy. For instance, a venture developed an in-car navigation system and tried to sell it unsuccessfully to automobile manufactures in Detroit. The right entry strategy was to sell it to car rental companies.
  5. *Gaps in the management team*, absence of an experienced businessperson, or incompatibility among partners.
  6. *Insufficient or erroneous information* may lead to wrong decisions.
  7. Wrong *timing of entry* may negate the advantages of the venture.
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8. Lack of *financing sources* is a serious obstacle, particularly in developing countries or transitional economies with high interest rates.
9. *Technology* may be inadequate or insufficiently developed and not available from outside sources.

Note that of the nine most frequent causes of failures, eight are business reasons and only one is technological.

## 2.4 Worldwide trends

The most important recent trends for the worldwide development of entrepreneurship, with emphasis on industrializing and restructuring countries, such as the Maghreb are listed below.

1. Innovation and entrepreneurship are the new forces driving worldwide economic growth.
  2. New technological businesses create wealth and employment, diversify the economy and develop exports, are models for regional development.
  3. The infrastructure for entrepreneurship is developing rapidly in industrializing and restructuring countries.
  4. There is an increased convergence of enterprise support systems: private and public sponsors, venture capital, universities, technology parks, and international joint ventures.
  5. Enhanced professionalism is evident worldwide in founding and managing innovative companies, creative financing of enterprises, benchmarking of performance, international networking (the Internet, e-commerce, m-commerce).
  6. Brainpower is replacing natural resources and heavy investing (“the intelligent corporation”).
  7. All countries have the potential for developing creative and innovative entrepreneurial firms and winning in global high-tech markets.
  8. Regardless of size, natural resources, and wealth, the Maghreb countries will be able to achieve higher world competitiveness and economic growth with progressive institutions, modern professional education, entrepreneurship, innovation and globalization.
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## 2.5 Growth of new ventures: from entrepreneurs to entrepreneurial managers

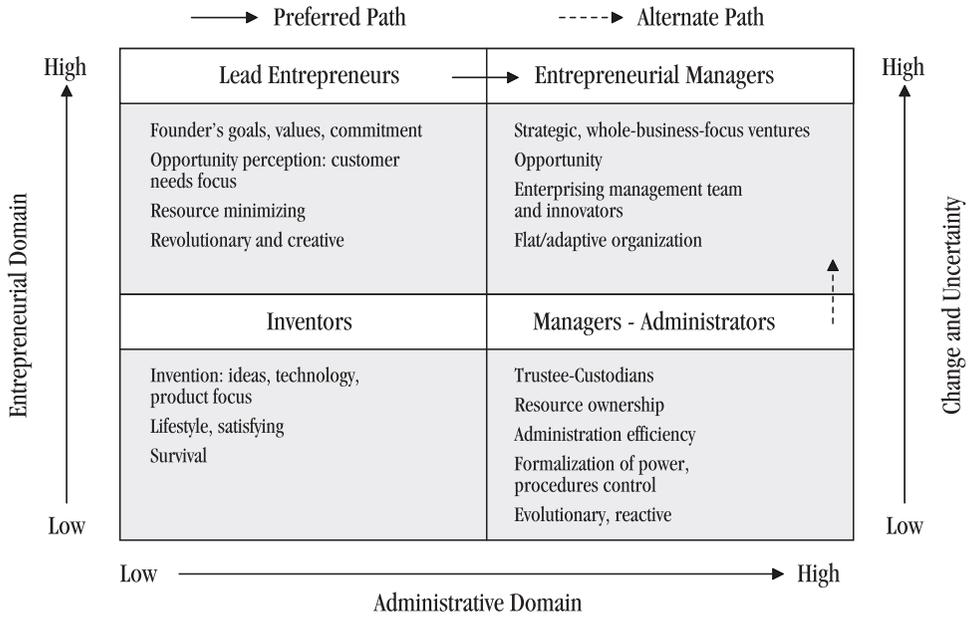
In many countries, including the Maghreb, it is not difficult to start a new venture. But it is difficult to grow a new venture into a long-lasting, high-value-added enterprise that will achieve increasing sales, profits, cash flow, exports and contribute to local well-paying employment and regional economic development. As discussed in section 1.3, in the United States approximately two-thirds of all new companies disappear within the first four years<sup>17</sup>. Other companies are unable to grow beyond the critical mass (about \$2 million in sales and 20 employees), and they are vulnerable during economic recessions or major changes in market demand and technology. Other entrepreneurial companies fail to achieve their full economic potential, suffer from stifled growth and become targets for acquisitions by competitors from other regions or countries. In most of these cases, the entrepreneurs, employees, investors and the local community end up foregoing the rewards for their hard work and their investments in money and efforts. The causes of these failures to survive or grow to full potential, are complex, but may be divided into two categories: internal and external. The internal causes are connected principally with the inability, or unwillingness, of the entrepreneurs to grow psychologically and professionally with the enterprise, or to major disagreements and divisions in the team of the founders. The external causes are connected with the inability to anticipate major changes in the business environment and, more importantly, to react strategically to these changes.

As discussed above (section 2.2.1) entrepreneurs enjoy a high level of creativity and innovation but tend to lack management skills and business know-how, which are necessary to grow a financially successful new venture. Therefore, they must acquire these skills by studying in business schools and working in established companies with sound management practices or, better yet, in dynamic and successful start-ups. Incubators and technology parks where other such companies are located are an ideal environment for this kind of apprenticeship.

After starting their companies, *entrepreneurs* must follow the entrepreneurial process in order to become *entrepreneurial managers* and grow their companies into successful sustainable business enterprises. Figure 4 displays the driving forces of this entrepreneurial process and shows alternate paths for becoming successful. Both paths start in the lower left corner of the matrix of figure 4. Most entrepreneurs start their companies as *inventors*. They focus on their original ideas, the technology and the product concept. In parallel they enjoy their unfettered lifestyles, and do not worry about money, often living from hand-to-mouth. Sooner or later they realize that their main problem is survival and growth. There are now two possible paths of growth: (1) in the entrepreneurial domain and (2) in the administrative domain.

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**Figure 4. The driving forces and alternative paths of the entrepreneurial process**



The preferred path of growth is in the entrepreneurial domain. The lead entrepreneurs define and sharpen the founders' goals, values, and commitments. They perceive more clearly the opportunity (Section 2.2.3, Chapter 3) and focus on the needs of the customers. At the same time, realizing that their resources are very limited, they minimize the need for these resources through creative approaches to product design, marketing, sales and financing. The founder entrepreneurs recruit new team members who share their vision and values. As the business grows in sales and employees and becomes more sophisticated, the lead entrepreneurs must make the transition to *entrepreneurial managers*. They need to develop a sustainable venture strategy that will focus on the entire business, sharpen and broaden the opportunity. They build up and maintain an enterprising managerial team with a flat adaptive organization that will nurture continuous innovation and be fully responsive to the ongoing changes in the economy, and the business, market and social environment.

The alternative path from inventor to entrepreneurial manager is much more difficult and follows the administrative domain. The inventor moves from the lower left to the lower right quadrant to become a *manager-administrator*, either by stifling the new venture or by selling the venture to an established company. The entrepreneur becomes by choice or necessity a trustee-custodian of the company and concentrates on the acquisition and ownership of resources, formalizing his/her power with procedures and policies for control. The company now evolves in a reactive way to changes in the environment and follows competition. Some

entrepreneurs resent, sooner or later, the new repressive climate of the venture. They feel frustrated and want to go back to the “early halcyon days” of the start-up. With strong will power and some luck, they may be able to make the transition from the lower left to the upper left quadrant and become entrepreneurial managers. Some may quit and start a new venture, utilizing the hard-won experience of their first attempt. The majority may give up their entrepreneurial ambition and settle down in their well-remunerated but unexciting administrative position. The problem is that manager-administrators are competent and successful in running well-established businesses *in a stable environment*. Unfortunately, the present worldwide political, economic and business environment has become unstable, and manager-administrators are unable to react to, let alone take advantage of, the changes. Their companies suffer high losses, some go bankrupt, and the incumbent managers are dismissed. In a recent example, the aftershocks of the 9/11 terrorist attacks caused the failure of many promising but poorly managed and overextended ventures as well as the tightening of venture capital sources.

It appears that the entrepreneurial process discussed above is also valid for entrepreneurs in the Maghreb countries. However, it may be more difficult to find a suitable location for the apprenticeship of the young entrepreneurs, due to the relative scarcity of new high-value-added ventures. Some of the new technology parks could fulfill this role. Another possibility is for the entrepreneurs to temporarily move to developed countries and work there in successful entrepreneurial companies. In that way, they would also establish business connections that could be useful for the expansion of their markets<sup>18</sup>. In parallel, aspiring entrepreneurial managers could follow executive and management development courses offered by local universities, often in conjunction with universities in developed countries<sup>19</sup>.

## **2.6 Case study: Zobe Chemical Industries (1946-2006)**

### **2.6.1 Background**

To illustrate the practical application of the principles of new venture creation discussed in this chapter, we now present the case of an Italian family company: Zobe Chemical Industries of Trento, Italy. This company, which was restarted from zero by two entrepreneurial brothers after the Second World War, has become a world leader in insect repellents, with a market capitalization of \$400 million and 3,500 employees in eight countries.

This case is of specific interest to entrepreneurs and economic development officials in the Maghreb for the following reasons.

1. Italy is a Mediterranean country, like the Maghreb.
  2. The new venture did not originate in the industrial triangle of Turin-Milan-Genoa but in Trento, a small city in the Alps (100,000 inhabitants) with no major industries.
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3. Because of the limited local market, the company started to export worldwide, and then acquired or built factories in Europe, Asia and South America.
4. The economic-industrial situation on Trento, 40 years ago, was similar to the present situation in the Maghreb; more specifically that of Tunis, Casablanca and Algiers, with good universities, some skilled labor, but few opportunities for high-value-added employment due to the limited local market.
5. At that time, no venture capital was available in Italy, and banks demanded guarantees based on collateral for making loans to new ventures. Therefore the Zobebe brothers financed their start-up and growth with their own limited funds and later with retained earnings. This is the present situation for many start-ups in the Maghreb.
6. Family companies are still a vital part of the economy in Italy and even more so in the Maghreb.

## 2.6.2 Creation of the new venture

As discussed above, the key elements for the successful creation of a new venture are the entrepreneurs, the opportunity and the resources. The two Zobebe brothers had a technical education: Luigi was a chemical engineer, and Fulvio a mechanical engineer. Their father, founder of the firm, had a factory in Trento that manufactured flypaper, a popular product in Italy before the war. When the two brothers came home from university, they encountered a dismal situation: the factory had been destroyed by bombs, the market for flypaper had disappeared because DDT had killed all the flies, and their father was despondent and unable to work.

The brothers became entrepreneurs by necessity and started manufacturing simple home hygiene products, such as steel wool, waxes and soaps, which they could sell through the same marketing network as flypaper. Their first opportunity came in the 1960s, when they were able to buy an almost bankrupt company that made coils which, when lighted, repelled mosquitoes that were still plentiful in Italy and in the Mediterranean area. The business prospered because the entrepreneurs had complementary skills. Luigi was an excellent chemical engineer, and his main interests were marketing and business strategy. Fulvio was a mechanical genius, who developed the production machinery. His main interests were production and personnel management. The two brothers, and later their three male children, valued family harmony and cooperation. All decisions by the board of directors, consisting of four family members, were unanimous, sometimes after heated discussions, and there was never the need for a formal vote.

A second, greater opportunity came in the 1970s. Luigi noticed that a Japanese company was offering a new type of mosquito repellent, simpler to use and much safer than the lighted coils. It was a small plug-in heater that heated a chemical tablet, producing an odorous vapor that repelled mosquitoes. One tablet lasted for the entire night and so windows could be kept open. Luigi tested the tablet,

guessed the chemical formula and registered it with the Italian patent authority. This product, and many complementary ones, was and still is the most successful of the Zobeles company.

The company was owned fifty-fifty by the two brothers and later, by their sons: Enrico, the son of CEO Luigi; Franco and Giovanni, the sons of Fulvio. The company was always profitable, and the two brothers, after paying themselves enough dividends to live comfortably, reinvested the retained earnings in the company, utilizing only a revolving bank credit line with minimal debt. This conservative financial approach ensured full control by the family, and lowest risk in case of economic recessions. However, it may have limited growth when the market was booming.

### **2.6.3 Growth and globalization of the company**

As we have seen, the Zobeles brothers became entrepreneurs by necessity after the war. As their company grew through product and market expansion, they made a successful transition from entrepreneurs to entrepreneurial managers. The CEO, Luigi, concentrated on worldwide market development, first in South America (Brazil and Paraguay) and then in Asia (Malaysia, China through Hong Kong) plus acquisitions in Italy and Spain. He developed a worldwide strategy for the company and also became a civic leader, the president of the Chamber of Industry of the Province of Trento and a benefactor of the Trento Alpine Society. Fulvio, the director of production and personnel, continued to develop the most modern and efficient property production lines, built a new factory with several hundred skilled workers, with compensation tied to production efficiency. All the workers were treated as extended family members. Union relations (often strained and contentious in Italy) were always excellent, and personnel turnover was half the prevailing rate.

The Zobeles trained their sons to succeed them. Enrico became director of marketing and later CEO, succeeding his father Luigi. Fulvio's first son, Franco, became technical director and director of production, while his second son, Giovanni, became director of personnel. The transition from the first to the second generation was slow but smooth, and family harmony and cohesion were safeguarded.

Initially, Zobeles Chemical Industries used its own brand name, Volcano, to sell products to Italian distributors and some foreign agents. However, as sales became more globalized and developing countries became attractive markets for insect repellents, worldwide distribution became an oligopoly of five major companies; three American, one German, one British. Enrico Zobeles abandoned his own brand, dismissed the sales staff and developed a new marketing strategy of selling to only two of these distributors. The new mission of the company can be stated as follows:

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“Zobe Chemical Industries is the leading international designer and manufacturer of selected innovative home hygiene products and deodorants, marketed worldwide by major distributors.”

Based on this mission, the company strategy was to develop innovative products of high quality and safety, of pleasant functional design, and manufacture them with the lowest cost, close to the served markets.

The third and major step in globalization was the acquisition in 1999-2002 of the Spanish group DBK, with sales of €30 million and 470 employees. While both Zobe and DBK produced insecticides and deodorants, Zobe was more specialized in insecticides and DBK in deodorants, which are not seasonal products. The two companies were also geographically complementary. Zobe's factories were in Italy, Brazil and Paraguay, while DBK's were in Spain, Brazil, Mexico and India.

With this acquisition, Enrico Zobe was able to create a group with €76 million in sales, 700 employees and eight factories in seven countries. The next major step was a major expansion into China, where the market was booming. The Chinese government was offering incentives, indeed it required that production facilities be located in China to supply the domestic market and export to other countries. With the assistance of the Italian commercial offices in China, Enrico Zobe made countless visits to China and was able to build up a greenfield facility. The community of Shenzhen (600,000 inhabitants) near Hong Kong, provided a factory (12,000m<sup>2</sup>), offices (1000m<sup>2</sup>), and lodging (8000m<sup>2</sup>) for the workers, mostly young women from other Chinese provinces.

According to Enrico Zobe the total hourly cost of a worker in China is only 5% of the cost of a U.S. worker and 6% of an Italian worker. However, productivity in the highly automated Western economies is much higher than in developing countries. Therefore, his strategy was to utilize the Chinese facility primarily for export worldwide. The rapid expansion in China, which employed 1500 workers compared to 800 in Mexico and 500 in Italy, naturally raised some concerns in Trento. However the Zobe family, as the leading industrialists in Trento, had a strong sense of corporate social responsibility. Employment in the Trento factory, which was highly capital-intensive because of automation, remained constant at 300. In addition, the new Zobe Holding Company is headquartered in Trento, with 25 employees. There is no danger that Zobe will imitate Ericsson, which closed its telephone factory in Sweden and subcontracted all production to Samsung in Korea.

## **2.6.4 Situation analysis in 2006 and sale of the company**

In 2006, Zobe Chemical Industries was a successful company with solid financial results, innovative products, global markets, growing employment and strong corporate social responsibility. The company had grown rapidly and profitably from 1999 to 2005.

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**Table 7. Financial results of the Zobe Company in 1999 and 2005**

	1999	2005	CAGR (%)
Revenues	75	210	19
Net income	5	15	20
Return on sales	6.8%	7.1%	—
Employees	700	3,000	28
Productivity	107,000	70,000	-8

In six years, sales grew with a compounded annual growth rate (CAGR) of 19% per year, despite the recession following the 9/11 shock. More remarkably, profits grew slightly faster, at 20% per year. Employment in six countries grew 28% per year, but productivity (revenue/employees) declined by 8% per year. This was due to the fact that the Chinese factories and to a lesser degree the Mexican factory are labor-intensive, compared to the Italian and Spanish factories, which are capital-intensive. Notwithstanding the rapid growth, the company remained profitable with a healthy return on sales (ROS) of 7.1% in 2006. International sales and production were well balanced and represented respectively 80% and 62% of the total.

However, some serious challenges were appearing on the horizon and had to be faced and countered by the five family owner-managers. Expansion was always financed primarily through retained earnings and modest bank loans. The two major customers were large multi-national distributors, which represented approximately half of the total sales. They demanded that Zobe continue to develop new products for them and invest in new production facilities, with no guarantee that they would buy the output. In fact, their orders were hard to forecast and unstable, and there was always the danger that they might move to cheaper competitors. The dilemma for Zobe was either to expand with high financial risk or to lose market share.

Succession is a key issue for all corporations and is particularly acute for entrepreneurial and family companies. The governance requirements of a family-owned company evolve as the business, family and stakeholders grow in size, complexity and diversity. The Zobe Company was rebuilt completely after the war by the two brothers, who controlled ownership and made all business decisions jointly. They passed on their shares and the management of the company to their three sons. Thus the original “sibling partnership” became a “cousin consortium.” Obviously, ties between cousins are looser than those between brothers, and more effort is needed to maintain family harmony and cohesion. A consortium of second cousins would be even more difficult to manage because in Western countries family and social ties are quite limited. This helps explain why only three percent of family companies reach the fourth generation.

In 2006, CEO Enrico Zobele was 56 years old and his two cousins were 54 and 45. The fourth generation comprised Tomaz, 20, the son of Enrico and a university student in economics, and the six much younger children of Franco and Giovanni. The third generation had been appointed directors at 45, 43 and 34 years of age. The fourth generation would therefore not be ready to take over for 15 to 20 years, when their parents would be in their sixties and seventies. With time, a gap would arise in the top management that could not be filled by family members.

Due to excellent and stable financial and strategic results of the Zobele Company, outsiders were making unsolicited offers to acquire the company. Finally, in 2006 the Zobelers received an offer from a British venture capital group that they could not refuse: €250 million for 83% of the company, corresponding to a market capitalization of €300 million. The three owners, with the concurrence of their fathers, decided to sell, maintaining 17% of equity in the family but losing control of the company, which continues to grow with Enrico as president and a new CEO. The strategy of the new majority owners, who have substantial funds available for investments, is to “dress the bride” and find a mature wealthy suitor, who will incorporate the company into his multinational operations.

### 2.6.5 Key success factors

Let us now return to the key success factors for entrepreneurial companies, discussed in Section 2.3 and analyze whether they are valid for Zobele Chemical Industries. We stated that the potential (P) of a new venture can be expressed by the simple formula:

$$\text{Venture Potential} = E \times O \times R$$

where:

E = quality and relevant experience of the lead entrepreneur(s) and team;

O = quality and durability of the opportunity; and

R = commitment of adequate required resources.

There is no question that the Zobele brothers were outstanding *entrepreneurs*, displaying all the characteristics described in section 2.3.1. Equally important, they were complementary in skills and personality traits and worked together in harmony, with a minimum of overlap in their responsibilities. The older brother also showed an uncanny appetite for recognizing and seizing opportunities. The second CEO is also an outstanding entrepreneur, with unusual ability for globalization of markets and production through acquisitions and joint ventures.

We recall that *opportunity* can be defined as the creative development of new products that serve existing or emerging markets. The products must create value for the customer and society at affordable prices. The first CEO bought an almost bankrupt competitor that was producing mosquito-repellent coils with obsolete machinery. His brother designed and built automated production lines and they

started serving the rapidly expanding markets in developing countries. The second opportunity was the reverse engineering of the Japanese plug-in heaters and pads. The third opportunity, seized by the second CEO, was to build greenfield production facilities in China, financed in part by the local governments, with the lowest production costs, to serve the Chinese market and exports worldwide. As developing countries increase their standard of living, they dedicate more funds to home hygiene products. Therefore the opportunity is highly attractive for Zobe: a rapidly expanding global market served by well-designed, high-quality and safe products.

Finally, the *resources*. As we have seen, the family owner-managers jealously safeguarded 100% family ownership, and grew the company mostly with reinvested earnings. This conservative strategy minimized the risk of takeover by outsiders, but may have limited growth in some periods. As true entrepreneurs, the CEOs leveraged their funds by establishing joint ventures, obtaining government incentives and bank credit lines at very favorable terms. *We can conclude that the Zobele company succeeded because of the two generations of outstanding entrepreneurs, the ability to seize at the right time emerging opportunities, and adequate (but not abundant) resources.* Thus, the new venture was able to realize its high potential.

An obvious question arises: could this type of company have been created in the Maghreb? After all, the products are technologically simple; there is a market for insect repellents in North Africa and the Mediterranean area; the resources needed are modest; and growth can be financed mostly with retained earnings. The simple answer is that a similar company could not have been created in the Maghreb before independence because of the lack of infrastructure. However, the infrastructure is now available in Tunisia (as discussed in section 1.4) and being developed in Morocco and Algeria. New generations of entrepreneurs are promoting innovative SMEs, and venture capital sources are becoming available locally and from the EEC. In conclusion, it appears that the Zobele case is very pertinent and timely as an example for the future economic development of the Maghreb.

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## CHAPTER 3: OPPORTUNITY RECOGNITION, ATTACKING DEVELOPING MARKETS

### 3.1 How to find new opportunities and market-finished products

There are thousands of opportunities for new businesses throughout the Maghreb, just as there are in the United States, China and Europe. As Tom LeFevre, developer of Intuit software says, the entrepreneur needs to focus on only four general principles:

1. Know your customer.
2. Provide a benefit. No one buys technology, they buy solutions.
3. Discipline is essential to success. You need discipline to check with the marketplace that you have the right solution.
4. There are only three things important in starting a company: have a product that people want, don't run out of cash and generate sales.

Opportunities tend to be defined by most entrepreneurship scholars in terms of the market. These scholars claim that opportunities occur because of environmental changes and that entrepreneurs should scan the shifting environment for direction and ideas for new products and services. As Schindehutte, Morris and Pitt write, an opportunity “implies a favorable set of circumstances in the environment that create a need or opening for an innovative business concept.” Certainly, the trend toward increased energy demand and global warming implies a need for energy-efficient products, and growing tourism in the Maghreb implies an opportunity for more tourist services.

It is more useful, however, to think of opportunities as connections between two things: one's capabilities or resources, on the one hand, and a market need on the other. Successful innovations are about connecting these two pieces of the puzzle, about supply and demand, provider skills and buyer needs, technical capabilities and needs for new solutions.

This definition significantly broadens the possibilities for new businesses. The aspiring entrepreneur asks what capabilities, technologies or talents he or she has on the one hand and scans the market for emerging needs on the other. A joke in the United States is that if you want to make a lot of money, you need two resources: a good mechanic and a loan from a bank. Then you buy an automobile transmission repair business. Few people want to be in this unglamorous business, but everyone needs it!

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If someone believes he or she can provide a service or product that already exists but do a better job, there are always opportunities for new businesses that offer more value than current businesses. In short, the first step is self-assessment. The goal of this step is a list of the aspiring entrepreneur's interests, skills, and possibly new technologies. Countries of the Maghreb have ample natural resources and good supplies of young, talented engineers. They are close to Europe, so they can supply fast turn-around for light manufacturing requests, much like Mexican businesses supply to the United States along the Texas border.

Assuming one knows oneself—one's interests, skills, resources, technical capabilities, network contacts and joys—why not produce something that is fun to produce?. The next step is to assess market needs.

### **3.2 Assessing market needs**

When a plentiful resource is aimed at a market need, lightning strikes. In terms of needs, for example, the American market is earnestly seeking healthier food products for children. The market has a plentiful offering of salty or sugary snacks with limited or no nutritional value. Conditions such as childhood obesity and early onset diabetes among children are pressing problems. However, there is an increasing demand for organic and healthy snack options, which creates some room for entry into the American market. Dates, for example, are low in fat and sodium, have no cholesterol, and are high in fiber and magnesium. They have more potassium than bananas and are very rich in iron. Given their sweetness, they may be able to supplant other, less healthy snacks already available in the market. The countries of the Maghreb could supply pre-packaged dates, which are currently under-marketed in the United States. Other export-oriented opportunities could include off-shoring by the EEC and the USA of telecom and electronic components, as already started in Tunisia.

In terms of needs for products and services in the Maghreb, there is a growing segment of the population that values service and convenience. This segment is located primarily in the major cities and consists of households in which both husband and wife work at relatively well-paying jobs. This segment wants a good supply of reputable service providers that have brand names they can trust; providers, for example, of fast food, sundries, rental items and repair work.

An easy way to start a business that caters to this segment is to buy a franchise. According to Justis and Judd, a franchise arrangement is "a business opportunity by which the owner (producer or distributor) of a service or a trademarked product grants exclusive rights to an individual for the local distribution and/or sale of the service or product, and in return receives a payment of royalty and conformance to quality standards."

In cooperation with the franchisor, the franchisee buys the rights to the name along with processes and business plans so that he or she can offer a local version of the franchisor business. In the case of Maghreb countries, it would be advisable to go

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to other Mediterranean countries to see what types and names of franchise operations have been successful. Certainly, there are many gas stations springing up throughout North Africa that are based on a franchise model. There might also be opportunities for fast food franchises from Western Europe or the United States as well as rental franchises for cars and bicycles, computer repair services, travel services and even educational services.

Benefits to the franchisee include:

- Established product or service;
- Technical and managerial assistance from franchisor;
- Quality control standards;
- Less operating capital, although it is possible to get back the initial investment in two or three years;
- Opportunities for growth.

The disadvantages include:

- High start-up costs (money to be paid to franchisor);
- Failed expectations;
- Restrictions of freedom of ownership.

See also Section 1.7.3 and Table 6 above.

We will now review how to assess the market and then develop marketing strategies and tactics. Specifically, we look at segmentation or targeting, assessing market needs, trends that affect market needs, and marketing finished products.

### 3.3 Segmentation and targeting

Assuming one has a tentative idea of the offering he or she can provide to the market, whether it is a service, technology or even a simple crafts product, the next step is to start thinking about the best target. No one sells to everyone today. Everyone has in mind a specific target. If the initial target turns out not to like the product, there is often a secondary or tertiary target. Jake Burton Carpenter, the inventor of the snowboard, initially targeted the boards to upper-income males in their twenties and thirties. They did not like the boards, but fortunately, the boards gained a large following among teenage boys. Jake changed his marketing program to address these boys and their special needs (e.g., more “radical” clothing), and the product took off. Snowboards have gradually attracted older and older “boarders” ever since.

Selecting a target is very important. Once a target is agreed upon, many other elements fall into place:

- Where to go to research and understand buyer needs;
- How to design the product;
- Where to distribute the finished product;
- What type of media to use to advertise the product;
- How much to charge.

A segment is a group of buyers who have a homogeneous set of needs. Assuming the principal benefits of the product, who will appreciate these benefits the most? If the product is a consumer product, this might be a certain demographic group, income group, ethnic group or geographic group (e.g., city dwellers). An obvious target in any category of products or services is the heavy user group. Typically 20 percent of the users in a category account for 80 percent of the sales. This group knows the product and what they want from it very well. If the product is an industrial product, the target might be small and therefore easy to reach.

Even before a target is established, however, the most obvious way to assess target needs is to use the product yourself. This sounds obvious, but it can often be very revealing if done carefully and correctly. This is important even if you and the product designers are not in the target. Designers of products for handicapped people have to learn how well their target users will do with new designs, so they might sit in a wheelchair or limit themselves to one hand when they use the product.

Another way to understand target needs is to use the product and ask: How can this experience be improved? Can it be speeded up? Can it be made more easily? Can it require fewer resources? Most products are basically tools. They are made to alter the condition of something. The name of many products implies what they do as tools: “clothes washer,” or “lawn mower.” It should also be asked: What does the product affect? What else could it affect? Shampoo is designed to clean hair. Procter & Gamble developed a widely popular shampoo called Head & Shoulders. It cleans hair but also treats a common scalp problem, dandruff. What else could that product affect? Hair needs to be clean, but it can also have a pleasant fragrance. Another popular shampoo in America has a strong fragrance component and is actually called “Gee, Your Hair Smells Terrific!”

After a target has been identified, it is important to visit the users, find out what they need and then make plans to revisit them as new product innovations and marketing plans are developed and more customer feedback is desired. Feedback from costumers is critical. In a recent study, 70 percent of successful innovations followed a demand pull (customer feedback) sequence rather than a technology or product push sequence.

If there is not enough money to visit and interview a large sample of product users, one easy solution is to interview “informants.” This concept is borrowed from

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cultural anthropology and it refers to people who are in a position or vantage point that gives them special insight into the lives and needs of the people under study. The great advances in Japanese cameras were due to improvements in precision and quality, but also to careful research the designers did among retailers in American camera shops. These retailers had a lot of information about camera owners who visited them with questions, technical problems, wants and needs and reactions to new camera innovations. The designers did not have to talk to many users. The shop owners gave them all the information they needed.

How many customers to visit? The goal is to have an adequate representation of buyers from subgroups in the target where each subgroup might represent a slightly different set of needs. If a Moroccan company is selling phosphates to European companies, they should contact an adequate sample of each of the relevant key buyer groups. If one group processes the phosphates for fertilizer, they might have different needs (order size, purity, low-cost shipping) than a buyer who wants a small batch of phosphates for chemical processing. The rule of thumb is to interview as many different buyers in the target as possible, to the point that all the possible responses have been surveyed. If a phosphate company representative goes to four fertilizer companies, and starts to hear the same answers, he or she has probably interviewed enough buyers in fertilizer companies.

Note that if the sale is a business-to-business sale, and it is to a large buyer, many people in the buying company should be interviewed. In a large company (more than 60 managers), there is usually a group of people called the decision-making unit or DMU. This includes everyone who has an interest in an upcoming major buy.

There are decision makers, end users, influencers and gate-keepers (those who allow the seller into the company). All should be interviewed because all have different needs. These needs might be based on where they work. Someone from the purchasing department wants low prices; from engineering, high-tech specs; from manufacturing, reliability and worker safety; from top management, overall fit with long-term strategic plans. In order to find these people, one needs to ask “who else is involved in making the decision to buy this product?” The seller moves from person to person in the buying company in what is called a snowball pattern.

The purposes of interviewing customers include the following:

- Identify unmet customer needs;
- Identify new market opportunities;
- Explore likes and dislikes concerning the current product offering;
- Understand the role played by the product within the customer’s operation or business strategy;

- Understand the customer's decision model and process for choosing among vendors;
- Generate possible explanations for observed market trends.

Visits of this type are not selling visits. There is an important difference. On these visits, it is important that buyers feel relaxed and comfortable. If they feel pressured to buy something, they will withhold critical information. If they are relaxed, they will provide information about their needs because it is in their interest to find the best possible product.

The challenge is to understand these needs. A chemical company developed a new chemical to sell to buyers and had three years of great sales. At that point, the chemical company decided to focus on product quality. They were convinced their customers needed the highest-quality product possible. Without consulting their customers, they purified the product in order to attain this very high quality. As a result, they lost thousands of dollars of sales. The buyers used the impurities in the chemicals to help them calibrate their instruments. Without the impurities, their instruments were inaccurate.

### **3.4 Customer interview questions**

The fastest, easiest way to gather useful information from customers about a product or product category is to do an "executive interview." The seller has a pad of paper with each page divided in half. One question is typed on the top half, another on the bottom. There is enough empty space for the seller to quickly jot down the buyer's answers, or they can be recorded with a tape recorder. An executive interview typically lasts between 30 minutes and one hour.

The goal is to get the respondent to speak openly and describe how their wants and needs are changing. The interviewer needs to reflect a mood of unconditional positive regard. The tone has to reflect total acceptance of whatever the buyer says. If the buyer is critical of the seller's current products, the interviewer should not argue with the buyer. Instead, it is important to keep the information flowing, encourage the buyer to talk more. If a buyer of Tunisian marble says "Your marble always arrives too late," the interviewer should not argue or be defensive. Rather, he or she should follow up with, "You have trouble with the timing of our marble shipments?"

Here are some useful questions to ask during this kind of interview:

- How have your needs changed in the last five years regarding X (product category)? What will you need over the next five years?
  - What would you do if X were no longer available?
  - What do you like about current versions of X? What do you dislike?
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- Are there any serious problems with X? Are there any issues involving X that keep you up at night?
- What do people who buy X value the most?
- Take me step by step through the process in which you use X. Please describe each step.
- If you could wave a magic wand and change anything about X or the company that sells it to you, what would you change?

If you have one or two or three products in mind, you can write a two-or-three sentence description of the product on small cards, give them one at a time to potential customers, and ask what they think. Sometimes it is also helpful to provide a diagram or drawing of each product to help the respondent understand the product idea. This approach, called “concept testing,” can yield a lot of information. The seller learns about reactions to the product idea, whether positive or negative. More importantly, the respondent can discuss why he or she likes it, that is, provide deeper information about his or her wants and needs in this category.

The following paragraph is an example of a concept statement written for a new home dry cleaning product.

“For homeowners, X is a new product that saves the time and money of going to a dry cleaner because it dry cleans suits, sweaters, blankets and draperies at home. It consists of chemically modified pieces of fabric that are put into a clothes dryer with items to be cleaned. Chemicals are released from the fabric to clean the items during part of the dryer cycle.”

In addition to using the product and interviewing users, the third major way to find opportunities is to watch end users use the product. Ideally, market researchers going on customer visits get to watch the current product being used in the customer company. When the researcher is observant, this method can provide many insights into new product ideas. Users are so habituated to usage rituals or routines that they become unaware of latent problems or needs. For example, Procter & Gamble, a manufacturer of personal and home care products, thought that people washed dishes by using two basins: soapy water to wash, clear water to rinse. They decided to test a sample of users and installed video cameras above the sinks in about 30 households. They found that a typical consumer would turn on the hot water, pick up the dish, squirt the dish with liquid soap, and then rinse it under the hot water and put it on a dish rack to dry. Hot water and liquid soap are expensive resources! To make the ritual cheaper and simpler, they introduced a new product: a washing brush with liquid soap inside.

### 3.5 How to conceive product and service ideas that customers cannot live without

When Motorola tested the first cell phone prototypes among doctors in two hospitals in Chicago, the doctors refused to wear them. They found them uncomfortable and bulky and felt there was no real need for them. Motorola begged the doctors to try them on a regular basis for three months. At the end of the three-month test, the Motorola researchers went back to the hospitals and asked the doctors to return the phones. They all refused! They said their work lives depended on them! The need for the phones was there all along, but it was a latent or “ghost” need that had to be brought to the surface.

Once the information from customer interviews and the observations of customer needs are assembled and analyzed, the next step is to come up with product ideas that address uncovered needs. A useful screen for generating ideas for new offerings is to ask whether the offering represents something the customer could not live without after using it for six months. How do you feel when a common technology like the Internet, a cell phone or a microwave oven is broken or unavailable? Doing without these items can be as frustrating as losing your right hand. If you use this criterion as a screen, you will come up with ideas that might not appeal to customers at first but can be sold with the right marketing. For example, if a car could be safely driven by an automatic pilot on freeways, what would drivers do with the free time that resulted? They would quickly find ways to use it and would then decide they could not get along with it.

Other rules of thumb for evaluating attractive opportunities include:

1. Revolutionary or evolutionary solution;
  2. Alleviation of customer pain;
  3. Large growing market;
  4. Team of industry experts;
  5. Feasibility;
  6. Low capital requirement;
  7. Positive cash flow by year two;
  8. Significant payoffs;
  9. Clearly defined exit strategy;
  10. Competitive advantage (e.g., patent).
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## 3.6 Marketing the finished product

If there is a strongly felt customer need for a product, marketing usually proceeds smoothly. For example, when electric refrigerators were first introduced in the United States, they became popular very quickly. The same is true of cell phones in the Maghreb. However, for radically innovative products—products that are very different and involve changes in buyer behavior—marketers often have to lead consumers or actively shape their wants and needs. Like the concept of an automatic pilot in cars, consumers might fail to see the initial benefits of a radically different technology or they might be afraid of them. As another example, suppose you could take a pill that would allow you to stay awake for 40 hours with no long-term adverse effects. An extensive trial period for selected consumers would be critical in gaining public acceptance of such a product. When people realized how much more they could accomplish by sleeping less, the product would see widespread adoption.

Product, Price, Place and Promotion, the four “P”, are the “Marketing Mix” of the new product.

### 3.6.1 Branding

Product, price, place (or sales location) and promotion (advertising) are the elements that go into the marketing mix for a new product. These elements together constitute a brand. Branding has become very important in marketing as more and more products and services compete for scarce customers, and customers look for indications that they can trust market offerings, especially if they are shopping in an unfamiliar category. A customer buying gas is more likely to stop at a gas station that sells an established brand than a station with a completely unknown name. A brand is a condensation of every experience that a customer has had in conjunction with the offering. If you were visited by a polite and helpful IBM salesperson, these characteristics would be part of your image of the IBM brand. If you have a reliable IBM laptop, this would also shape your image of the brand. These images are condensed because of the difficulty of retaining each separate item that determines the total image.

Ideally, all elements of the marketing mix are integrated so that they reinforce each other, and the total brand impact is greater than the sum of the individual parts. In the best, most effective marketing plans, all elements reflect a highly focused, single core benefit proposition, or CBP, of the brand. This proposition is based on a core benefit that is valued by the target buyer. In the United States, General Electric sells technology to companies that want the very newest in technological innovation. Therefore, all the “touch points” or marketing communications and mix elements presented to buyers reflect the theme of technological innovation. GE’s product line consists of the newest, most exotic technologies (e.g., wind power generators), their advertising features benefits of their new innovations and uses the slogan “Imagination at work,” their prices are the highest in their respective

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categories, and they rely extensively on new media and channels for distributing and staying in touch with their customers such as the Internet.

In short, in designing marketing mix elements, it is vital to keep in mind the CBP sought by the target customer. With these two things in mind – the CBP and the target customer – everything else falls into place.

### **3.6.2 Product**

Toyota is a good-value, high-quality car. That is its value proposition. When Toyota saw the opportunity to come out with an upscale, high-prestige car, they did not try to develop a Toyota product with the Toyota name. Instead, they produced a car in this category and named it Lexus. A high-cost, upscale car with a Toyota name would not be consistent with the Toyota CBP.

### **3.6.3 Pricing**

If a product is new to a market, and it appears that demand for the product will be high, it is advisable to charge a high price. This is called “skimming,” and it gives the manufacturer time to recoup start-up and manufacturing costs. A high price is especially important, however, if the CBP calls for it. If the product will deliver a highly sought value, the price should be high relative to current products on the market.

### **3.6.4 Place**

Place, or the distribution function, deals with utilities of time, form and place. The distribution plan describes how buyers’ wants will be satisfied in terms of timing (when the product is needed), form (how the product is configured) and place (location of use or consumption). Here, as before, the elements should agree with the CBP. Suppose the buyers of a software service need a supplier who can do programming for them very quickly. The name of the company might be something like “Lightning Programmers.” The company should be able to write and send out software quickly in a form that is ready to use. Obviously, the best way to send it would be via the Internet.

### **3.6.5 Promotion**

The main function of advertising for a new product is to make buyers aware of it. In industrial marketing, this is not too difficult because industrial buyers are always looking for ways to improve their business processes. In consumer marketing, it can be very difficult because consumers can be hit with thousands of advertising messages each day. Whether the product is industrial or consumer, the goal of advertising is to feature the product’s CBP.

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### 3.7 Summary

There are innumerable opportunities for new businesses in the Maghreb as well as in other developing countries. The challenge is to match skills, resources, technologies and interests, on the one hand, with ongoing and emerging customer needs on the other. While the focus on customer wants is not always a sufficient condition for success, it does keep the entrepreneur focused. Many entrepreneurial ventures start by assessing and then addressing customer needs, but drift away as the product goes through more stages of development. A savvy entrepreneur is also able to see needs the customers themselves do not see. In these cases, the entrepreneur “leads” or “shapes” customer needs insofar by bringing a new product to market that customers find, after a period of adaptation, they cannot live without. The latter cases might require placing the new product with a lead user or trend-setter customers as well as providing products for extensive trial use by the bulk of the customer population.

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# CHAPTER 4: FUNDING SOURCES FOR SMALL ENTREPRENEURIAL COMPANIES

## 4.1 Introduction

Generating capital is the most important part of a business activity. More than 60 percent of small businesses stated that their success or failure depends on the security of funding activities. Yet as far as small entrepreneurial companies are concerned, access to funding sources is not an easy task. Therefore diversifying financing sources is always beneficial to developing small business activities, especially when these are of paramount importance in the development process of the whole country as a major source of income and employment. The Maghreb countries are currently contributing to the development of the set of funding sources to small businesses through promotional efforts. It is indispensable, however, for entrepreneurial companies to do more. This chapter focuses on the available funding sources for small businesses (funding start-ups or expansion). It outlines the advantages and disadvantages of each alternative. Moreover, it highlights key issues that an entrepreneurial company must address when it raises funds according to each alternative. This chapter first tries to describe financing models and sources available in the United States, which are more developed than most European funding models (specifically the French). Second, financing sources in the Maghreb are described.

Generally small businesses turn to basic forms of funding: debt from lenders or equity from investors. Banks are recorded to be the most common source of financing through debt. Equity financing is afforded by individuals or firms; these may or may not take part in daily activities. Before detailing the various financing sources, it is worth noting that funds are often raised for four main categories: (1) start-up costs, inventory and human resources; (2) capital equipment; (3) working capital required for funding the ongoing operations of the business; and (4) additional funding required by growth corporations for future expansion. Even for a growing small business that has already had some access to financing sources, growth might result in two types of funding needs. One is the need to purchase long-term productive assets to generate growth in sales and revenue, and the other is the need for additional working capital to fund growth, which includes funds to purchase more materials, payrolls, warehousing, etc.

The inability of small firms to readily access capital markets makes securing financing imperative for their start, survival and growth. Generally speaking, after entrepreneurs exhaust their internal funds, the growing entrepreneurial firm has to rely on external financing. A life-cycle perspective is typically emphasized in funding entrepreneurial companies. A typical entrepreneurial firm will go through the development stage, start up stage, survival stage, rapid growth/expansion stage

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and mature stage. Hence, at different stages, an entrepreneurial company has to secure financing to address different needs. Early-stage financing consists of seed money, which enables the business to complete a business plan, and start up financing, which funds the firm's operations before products are actually sold. First-stage financing is used to initiate full-scale production and marketing. Expansion financing then consists of second-stage financing to increase working capital before profits are shown, third-stage financing (Mezzanine) to finance product enhancement, and bridge financing that allows the firm to temporarily fund its activities before the next round of financing is complete.

Other than personal savings that entrepreneurs may use to finance their small business needs, there are other potential sources available to support the business.

## **4.2 People-to-people funding**

Many small businesses (and possibly most start-up firms) are financed by borrowing from friends and relatives. These sources may not require a formal business plan, although presenting one can often be a very important part of gaining assistance from this important group of potential lenders or investors. The main disadvantage of financing a business with this source of capital is the potential for particularly stressful circumstances. Thus, it is often best to treat borrowing from a friend or relative as a formal business transaction by putting the agreement in writing (e.g., obtaining a standard business loan form to use as the basis for negotiations, using the services of a lawyer to assist with the contract and ensure its enforceability, etc.).

## **4.3 Personal line of credit and business credit cards**

Entrepreneurs can sometimes fund their companies using their personal line of credit. In the American case, if an entrepreneur has demonstrated credit worthiness with a bank for several years through timely payment of bills and accumulation of savings, the bank may be willing to extend a personal line of credit. For small entrepreneurial companies, a personal line of credit can be a good source of money, especially when the small firms are not incorporated. The amount of loanable funds is pre-established and pre-approved. The entrepreneur can use the personal line of credit repeatedly as long as he/she can repay the debt and monthly interest. In the Maghreb, the great majority of commercial finance companies are consumer-financed companies and credit is restricted to salaried personnel.

Credit cards can be an alternative financing option when an entrepreneur has exhausted other sources of funding. The main advantages of using credit cards to fund the entrepreneurial companies are that the maximum borrowing level has been pre-specified and the money can be accessed instantaneously. However, the interest rates on credit card are generally higher than other sources of funding. If the

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borrower cannot maintain a proper schedule of payment, the interest rates can be astonishingly high because of the compounding effect.

## 4.4 Bank loans

There are two types of loans offered by banks: secured or unsecured. Secured loans can be taken in the form of home equity loans, mortgage loans or mortgage refinance loans, all at a lower interest rate compared to unsecured loans. Either of these loans can be taken against a house or other property as the security. Default on payments can cost losing the property, so timely payment is crucial.

The unsecured small business loan works in a similar way to a credit card. Even though the loan does not require any collateral, the borrower must pay back the loan on time in order to maintain a good credit record. Unsecured loans are typically processed and approved faster and more easily, without any detailed documentation. With the help of unsecured loans, a small business owner can finance any of the small business' requirements. The interest rates on an unsecured loan, however, would be higher than for secured loans.

Small business start-up loans are usually given in the form of term loans, which can be paid back over 10 years, repayable in equal semi-annual installments. These loans are typically provided to finance the working capital and fixed assets of a small business. Term loans are secured and the lender requires the borrower to pledge the asset that is being financed by the loan. However, the other assets of the firm can be used as security for the loan, and the interest on term loans is a legal obligation that needs to be paid irrespective of the financial condition of the business. U.S. banks usually charge an interest of 10-14%, and defaulting on these loans exposes borrowers to penalties. If the borrower defaults on the loan, he/she becomes liable to make payments by liquidating damages and an additional interest of 1-2% is charged.

Banks often evaluate several characteristics of the small business when making lending decisions. These include the amount of capital held by the small business, the character of the small business and/or its owners, the availability of collateral to secure the loan, the capacity of the small firm to repay the loan, and the conditions (industry and economic) under which the small firm is operating.

Loan restrictions will often be placed on debt financing. These restrictions, also known as covenants, specified by a bank may put constraints on the business' permissible financial ratios. They may also allow new borrowing, veto new management, not allow for the development of new products or directions, bar the business from acquiring new assets, or not allow new investment or new equipment. The small business owner should be aware of the consequences of such covenants and take them into consideration before accepting the loan.

## 4.5 Trade or supplier credit

These are payment terms offered by the business' suppliers that may include discounts for early payment, extension of credit lines, negotiation for longer repayment terms, arranging for payment to become due only when merchandise arrives at the business rather than on the date when it is shipped, etc. It is important not to depend on a single supplier's credit line but rather to divide the business among a few suppliers, because if repayment problems arise, the business might be cut off from its major source of supplies. Although many business owners turn to suppliers for capital only as a last resort alternative, negotiating for better payment terms can become an essential ingredient for the financial business' needs and future growth.

## 4.6 Customers

When customers pay for work in advance or provide some of the materials themselves, they are in effect financing the business. It is not uncommon to ask for all or a portion of payment as cash up front, especially when providing a long-term service or ordering special items. Customers can also help a business establish a new credit line with a supplier and get access to supplier financing by writing letters of credit when their order is placed.

## 4.7 Assets leasing

Reducing expenses is another way of efficiently allocating capital because it frees up funds that would have been spent otherwise. One way to reduce cash outflow is to lease assets such as real estate facilities, automobiles, office furniture and machinery rather than to buy them. As part of the lease agreement, a company is sometimes able to negotiate the purchase of the leased equipment at the end of the lease period. Leasing has both tax and depreciation implications which benefit the small business in the short run. Also, it is generally cheaper to lease an asset than to buy one, given that a lease can allow for low monthly payments that enable the business to grow over time, whereas eventually the business can refinance the loan when time and interest rates permit. Moreover, when negotiating a lease, a business may be able to arrange payments that correspond to seasonal peaks or growth patterns. Leasing deals, however, should be formally evaluated, since in the long run leasing is generally more expensive than bank financing. Furthermore, leasing is often limited to items that have a long serviceable life, transferable use, or are easily repossessed in the event of default.

There are a few ways that a lease can be modified to increase the cash position of a business. In general a down payment of lower than ten percent of the deal or no down payment at all is preferable. Maintenance costs that are built into the lease package would lower expenses rather than forcing the business to pay for them as

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needed. Extensions of the lease term to cover the entire economic life of the property, a purchase option, and payments that can be structured to accommodate seasonal variations in the business or tied to indexes that track interest to create an adjustable lease are also good ways to establish a better lease contract.

## 4.8 Commercial finance companies

In the American case, new or expanding small businesses may be denied traditional bank loans because they generally do not have any trackable records. Entrepreneurial companies' existing debt, limited collaterals and past business difficulties may prevent them from pledging for bank loans as well. In these situations, a commercial finance company may be an alternative source of financing. While commercial finance companies, like banks, are concerned with the borrower's collateral, they also take the business' track record or profit forecast into consideration, when approached with a loan request. These firms may even lend more than the net worth of the borrower, a situation which is usually undesirable to a bank. However, there is usually a penalty to pay for having to do business with a commercial finance company. Because finance companies are willing to take on higher-risk loans, they typically charge higher interest rates. The main methods of financing offered by commercial finance companies are loans collateralized with accounts receivable and inventory, equipment and real estate, or partially or totally secured loans based upon the borrower's potential profitability, rather than on collateral.

In the Maghreb, the great majority of commercial finance companies are consumer-financed and thus not accessible by start-up businesses.

## 4.9 Venture capital

Venture capital refers to funds that are invested in an unproven business venture. Venture capital may be provided by professionally managed investment funds, government-backed small business investment corporations (SBICs), or subsidiaries of investment banking firms, insurance companies or corporations. Such venture capital organizations generally invest in private start-up companies with a high profit potential, and often consider investments no smaller than \$2 million in the United States. In exchange for their funds, venture capital organizations usually require a percentage of equity ownership of the company, some measure of control over its strategic planning, and payment of assorted fees. Due to the highly uncertain nature of their investments, venture capital organizations expect a high rate of return, 30% to 40% or even exceeding 50% a year. In addition, they often wish to obtain this return over a relatively short period, usually within three to seven years. Beyond the short time horizon, the equity stakes held by those investors are either sold back to the client company, sold to a third party, or offered on a public stock exchange as an Initial Public Offering (IPO).

Venture capital is somewhat more difficult for a small business to obtain than other sources of financing, such as bank loans and supplier credit. Before providing venture capital to a new or growing business, venture capital organizations require a formal proposal (business plan) and conduct a thorough evaluation. The survival rate of business plans for the pre-investment screening is known to be very low.

However, venture capital offers several advantages to small businesses, which are known as value-adding services. For example, venture capital firms can provide management advice, monitor progress and seek appropriate alliance partners for their portfolio companies. In addition, venture capital is crucial to some start-ups or concept businesses, especially when bank loans and other forms of financing are not options for young and risky firms. The disadvantages associated with venture capital include the possible loss of effective control over the business and relatively high costs over the long term. Overall, experts suggest that entrepreneurs should consider venture capital to be one financing strategy among many, and should seek to combine it with debt financing if possible.

#### **4.10 Angel investors**

In the American case, angel investors are individuals who are interested in investing in early-stage or start-up companies in exchange for an equity ownership interest. Angel investors are likely to invest only upon seeing a business plan for a business with clear potential for profit and growth. These investors are often willing to invest in ventures that are too risky for banks or not profitable enough for venture capitalists, and are usually willing to put up no more than \$500,000 per business. Angels therefore can sometimes be the stepping stone between a new venture's creation and when it approaches a venture capital firm for a large infusion of capital. Angel investors, similar to venture capital firms, are primarily motivated by a return on their investments.

Angel investors can be a good source of advice, guidance, networking opportunities, and other financing resources, in addition to their own angel financing. They tend to invest in businesses they believe in, are interested in, or in which they have experience, often located in geographic proximity. Angel investors are also typically more interested in a business' founders and management team than other investors, and although they expect to cash out of their investment at some point in the future, they may invest for five or seven years, which is longer than many other types of investors.

In contrast to venture capital investment, risk capital provided by angel investors is not formally organized. Today, however, angels have, in some cases, joined together to form groups and are also listed with business and investment organizations. For years it was typically with friends and business associates that one would need to network in order to find the name of angel investors. Now entrepreneurs can find guidelines on the Web sites of those investment organizations that inform

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entrepreneurs what types of businesses they are interested in backing and how to best go about reaching them. According to an angel network activity survey conducted by ChangeWave Research Services in Rockville, Maryland, active angel groups, on average, generally include up to 85 members who seek a 35% return on their investment. In addition, angel groups typically invest between \$2 million to \$5 million per year in their portfolio businesses and have invested an average of \$9.5 million in start-up companies since their inception. Like the exit strategies of venture capital firms, a cash or “liquid” return is usually achieved by selling the business or taking the business public and allowing investors to sell their shares to someone else through the public markets or through a repurchase agreement.

In the Maghreb, there are few angel investors, except for family holdings which assume this role.

## 4.11 Private placements

In the American case, through a private placement, a small business can sell stocks or bonds in a non-public market to a number of selected private qualified investors. In the United States, under regulation D, private placements often do not need to be registered with the Securities Exchange Commission (SEC), which provides a way for a small business to exempt itself from lengthy, cumbersome and costly registration requirements. According to Thompson Financial, over \$416 billion was issued in the private placement market for 2002, and the majority of those dollars came from pension funds, investment pools, banks and insurance companies amounting to just over 2,000 deals.

Private placement offers a viable form of business financing without the constraints of taking a company public and conceding control. Other advantages of financing a business with private placement are: (1) A high degree of flexibility in amount of financing ranging from \$100,000 to \$10-20 million with combinations of debt and equity capital; (2) investors who are more patient than venture capitalists, often seeking 10 to 20% return on investment over a longer term of 5 to 10 years; (3) much lower costs than approaching venture capitalists or selling the stock to the public as an IPO, and (4) a quicker form of raising money than the usual venture capital markets.

Money raised through private placements typically comes from accredited investors defined by the SEC, Rule 501 under Regulation D, as individuals earning at least \$200,000 per year, households with income of over \$300,000 per year or having a net worth over \$1 million, or as venture funds, some banks and other institutions.

Private placements are of limited interest for entrepreneurs in the Maghreb at the present time.

## 4.12 Equity financing

In equity financing, additional individuals or firms provide capital for the business but may or may not take part in its operations. General partners are then those who normally contribute both capital and management time and share in business responsibilities and liabilities. Limited partners are individuals who contribute capital to the business but who normally have neither management responsibilities nor liabilities. Finally, a sole proprietorship is a business where there is only one owner, and this person is responsible for all the company's debts.

More than 40 U.S. states have enacted small corporate offering registrations (SCORs) allowing small firms to issue up to \$1 million in equity over a 12-month period. Originating in Washington State in 1988, these SCORs are governed by the state where the small business was formed according to SEC regulations. Firms must be able to sell these securities without the help of an underwriter, and the prospectus for such offerings is generally referred to as a U-7. Unlike traditional IPOs, these offerings are more commonly termed DPOs or direct public offerings. The more traditional option of going public through an IPO is the final step for a small firm in its lifecycle and can be used as an exit strategy for founders/owners.

To establish a corporation, numerous equity investors are usually needed. Each investor is a stockholder and owns part of the company. Undertaking the IPO process, a privately held corporation seeks to offer ownership to the general public. Shares are sold by an investment bank or stock brokerage firm. Since the objective is to raise money, the corporation can obtain equity financing through the issuance of a number of instruments. For example, Common Stocks might be issued to friends, relatives and investors. Preferred stocks represent ownership in the business but require that its holders be repaid first if the business should go bankrupt. A corporation has certain advantages in obtaining funds, as it is more highly regulated than other forms of business organization. It can be very expensive to raise funds through common stock offerings because of the legal fees associated with Securities and Exchange Commission (SEC) filings. Although SEC filings are not required for all public offerings, there are other costs associated with raising equity financing such as printing costs and general solicitation fees.

## 4.13 The Small Business Administration

The Small Business Administration (SBA) is an independent federal government agency established in 1953 to assist small businesses. The SBA provides loan guarantees and, if funds are available, makes a very limited number of direct loans. To receive financial assistance from the SBA, a business must be unable to secure reasonable financing from other sources. A business must also fit the SBA's generalized criteria defining a "small" business, which vary for different types of businesses. The loan proposal for the SBA is more complex and requires more

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documentation than the one for banks. However, the SBA can process most loan guarantee requests quickly.

#### **4.14 Certified development companies**

The certified development company (CDC) program helps finance small business activities by providing long-term financing for fixed assets through the sale of SBA-guaranteed debentures to private investors. Under this program, the SBA guarantees the timely payment of 100% of the principal and interest on debentures issued by the development companies it has certified. A public-private group organizes itself as a CDC to sell debentures, raising capital for small businesses in its state or local geographic area. After meeting certain requirements, the group is certified by the SBA as a CDC, and its debentures are fully guaranteed by the agency. The guarantee reduces the investor's risks, which lowers the debentures' rate of interest and attracts purchasers. In the end, this means lower borrowing costs to small businesses.

The CDC makes loans to small, independent for-profit businesses. Loan recipients cannot have a net worth exceeding \$6 million, nor can their average annual profit for the previous two years be greater than \$2 million. Certain types of companies are ineligible for CDC loans, notably media, lending, investment, non-profit organizations, or gambling enterprises. The small business also must meet an owner occupancy test. Projects financed or aided through SBA-guaranteed debentures under the CDC program may include land or building acquisition, facilities construction, renovation, or modernization, leasehold improvements, or machinery and equipment purchase. Interim construction interest and professional fees for services such as appraisals, surveying, accounting, engineering, and architectural services may be paid with debenture funds. Proceeds cannot be used for counseling, loan-application fees, working capital, or a single-purpose building. The minimum loan is \$100,000.

#### **4.15 Government agencies**

There are a variety of government assistance programs available to small businesses at the local, state and national levels. This assistance normally takes the form of targeted loan packages or loan guarantees.

At the local level, a small business can contact the city, village, or county board to inquire as to the existence of any community development block grants (CDBG). This is money provided by the federal government (through the Department of Housing and Urban Development) to local governments for use in lending to local businesses.

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At the state level, the U.S. Department of Commerce (DOC) has several programs available. The economic development program provides money available to communities for loans to small businesses similar to CDBG funding. However, the business must be in a community with fewer than 50,000 residents.

At the federal level, in addition to the SBA, there is the Business and Industry Loan Guarantee program of rural development. This program is for existing businesses in cities with fewer than 50,000 residents.

Finally, grant money is available, but generally it is only for small businesses doing innovative research. The Small Business Innovation Research (SBIR) grant program is designed to reduce the barriers that have prevented small businesses from competing for federal R&D funds in the past. Competition for SBIR grants is extremely keen with only 6%-8% of applicants receiving a first phase grant.

## **4.16 Funding from other businesses**

Small entrepreneurial companies can obtain funds from other businesses when small businesses have patents, human resources, a geographic presence or marketing arrangements that can benefit the potential partners. This funding can either be through a partnership/alliance, with the two companies remaining separate entities, or through a takeover, with the contributing firm taking a controlling stake in the small business. The owners/founders of the small business can retain control of a company despite the infusion of capital from an existing corporation through governing director's clauses or other such mechanisms devised to protect the interest of control for the owners.

Small business owners might be able to take advantage of this situation by increasing salaries or other perquisites instead of providing a return to the company that provided funds. A buyout option is one mechanism developed to overcome this undesirable possibility. Other contractual arrangements can and should be considered to protect both parties' interests. Furthermore, many countries have legislated some forms of minority protection against the excesses of unscrupulous shareholders. However, the cost of litigation continues to outweigh the benefits of a favorable decision in many cases.

## **4.17 Funding sources in the Maghreb**

As has been shown, small businesses account for a great part of the economic activity of developing economies. They are an important source of non-farm income and employment. Because the sustainable growth of small business is essential to support overall economic development, governments in the Maghreb countries are striving to facilitate business development, especially businesses that add the most value to the economy, such as high value-added Information

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Communication Technology (ICT) start-ups and other innovative projects. Because funding is often the most difficult hurdle, providing financial access to young businesses is the most important way to facilitate their growth. To reach its goal of creating 70,000 SMEs by 2009, the Tunisian government has established two new agencies: The Bank for SMEs (BFPME) and a special fund that guarantees financing for innovative projects (SOTUGAR). Tunisians are concerned with the development of SMEs. "Given the importance of funding in the process of SME creation, measures will be taken in order to enhance the role of capital venture investment companies like SICAR so as to increase their involvement, in addition to the financial support granted by the Industry Promotion and Decentralization Fund. At the same time, to encourage banks to finance these types of projects, a new risk-sharing system is being set up that will grant loans to medium-sized companies that operate in the sector of industry and services."<sup>19</sup> In Morocco, entrepreneurs lack access to formal financial services, so they must find their own financing, for example using their own savings or non-governmental moneylenders, whose rates are extremely high. In response to this problem, the government of Morocco created a funding facility of \$10 million (the Fund Hassan II), with the objective of supporting the microfinance sector and other reliable businesses that will add value to the Moroccan economy.

In Algeria, funding for small and medium businesses was offered within the framework of SME in cooperation with Euro Development in the Ministry of Handicraft and SME. It was a program of structural reform that also had encouraged a financial component. This program encouraged the creation of banks, restructuring of guaranteed institutions, and it offered financial assistance to small firms. However, this cooperative program was essentially shot down by the Algerian government in 2007-2008 and replaced by an Algerian government program, but data are not available. Algeria is also interested in developing innovation within small businesses and has defined a national strategy for industrial innovation with assistance offered by the European Union. In general, micro financing projects in the Maghreb countries are an emerging mechanism for tapping into a growing market as well as for enhancing the creation of new businesses.

## 4.18 Venture capital in the Maghreb

Private equity/venture capital is defined as temporary participation in companies that are not listed in any stock markets by an external investor. In Tunisia, Algeria and Morocco alike, attempts are being made to develop capital investments. However, success rates vary from country to country. According to the World Economic Forum 2007-2008, Tunisia is ranked 27 with a score of 4.20 when it comes to venture capital availability<sup>21</sup>, while France is ranked 30, Morocco 73, and Algeria 106.

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Investing in a venture capital transaction is a complex and drawn-out process. The phases in the investment process include:

- Identifying the investment opportunities;
- Analyzing the investment;
- Deciding to invest;
- Following up on the investments made;
- Exit from the project.<sup>22</sup>

To be effective, venture capital should be backed up by favorable market conditions:

- A sound and sophisticated financial market<sup>23</sup> that ensures value creation, exit strategies, etc.;
- A strong legal environment and corporate governance;
- Competitiveness within SMEs and a focus on innovation and university-industry research collaboration.

One example of a venture capital institution operating in the Maghreb is the Fonds Méditerranéenne Capital (FCR) or Méditerranéenne Fund, a private equity fund with the mission of creating general investment opportunities in Morocco, Tunisia and Algeria. This fund, which emerged from the Barcelona Process (1995-2005), is aimed at revitalizing the relationship between EU countries and their neighbors to the south. Its objectives are:

- consolidating traditional economic sectors in the Maghreb region;
- promoting investments in emerging sectors;
- strengthening the international presence of local companies; and
- supporting European firms as they become established in the Maghreb.

While this private equity is driven by the goal of strengthening relationships between the countries both north and south of the Mediterranean, the focus is “on accelerating the rate of scientific and technological cooperation ... emphasizing the efforts to support technological research and commercial development in the Maghreb countries.” The fund invests between € 1 and €9 million, and the sectors that would benefit the most from this funding are SMEs that offer innovative projects.

Another successful example of VC is TUNISINVEST, part of the Integra group and its affiliates MAROCINVEST, MAGHREBINVEST-ALGERIA, a private equity house. The Maghreb private equity fund I was fully invested in 2008 with 20 percent per year returns. In June 2008, Fund II raised € 125 million, targeted to family businesses and SMEs in the Maghreb.

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In the countries of the Maghreb, the availability of venture capital is usually highly correlated with the formation of new businesses. Therefore, it is impossible to discuss entrepreneurship without also discussing private equity funds and their availability. Furthermore, along with the venture capital industry, the quality of the human resources that are available is essential in creating value in new businesses.



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## CHAPTER 5: INTELLECTUAL PROPERTY

### 5.1 Introduction: Fundamentals of Intellectual Property

Since the beginning of civilization, artisans, artists and builders have jealously guarded the secrets of their trade in order to avoid unauthorized appropriation by competitors. These trade secrets were transmitted from father to son and were often lost when the family died out or lost interest. One classic example is the Stradivari family of Italy (1670 – 1740), which developed a unique technology for constructing violins. The sound of their instruments is unmatched by modern craftsmen, even though they have all the resources of acoustics, electronics, numerically controlled woodworking machinery, and the chemical analysis and synthesis of paints and lacquers available to them.

To avoid the loss of trade secrets, governments have developed laws and policies which guarantee the inventors the exclusive use of their inventions for a specified number of years in return for an open disclosure through a patent application (from the Latin *patere*, to be open). In fact, the Constitution of the United States includes the following sentence “the Congress shall have the power... to promote the progress of science and useful arts by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries.”

In this chapter we first present an overview of intellectual property (IP) within the context of entrepreneurial and innovative companies. We discuss the various methods for protection with reference to the United States, the world’s leading market. We then present the structure for IP protection in the Maghreb. Finally, we summarize a recommended procedure for obtaining international patents, that is, patents that are valid in selected countries outside the inventor’s home country.

Intellectual property is often considered intangible, but is in fact similar to real property, such as land, plant and equipment. IP is thus a valuable asset of the firm, to be protected jealously from theft or unauthorized use. Questions about ownership of IP are more complicated than questions about real property ownership because patent claims have less tangible boundaries. Therefore, it is necessary to have professional legal help in describing, regulating and, if necessary, defending a firm’s IP.

But this does not mean that intellectual property protection is an “all risks” insurance against forgeries. According to Baron and Shane, protection does not make imitation difficult, it makes it illegal.

In many countries, and especially in developing and emerging countries like China, the counterfeiting of industrial products, music CDs, film DVDs and computer software is commonplace. These counterfeit products are sold at unbeatable prices. Even when the original products or brands are protected by copyright laws, with

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registered brand names and patents, and even with the threat of severe penalties, counterfeiting flourishes.

Manufacturers do have some protections. Several organizations regulate the protection of IP.

- International conventions like the Paris Convention (1883), the Berne convention (1886) and the Marrakech agreement (1994) pertaining to the creation of the World Trade Organization;
- National intellectual protection organizations;
- International organizations like the World Organization of Intellectual Protection and the Internet Corporation for Assigned Names and Numbers (ICANN), which manages domain names of Internet sites.

When there are disputes about IP, it is often the courts in the countries where the counterfeiting was discovered that have jurisdiction.

## **5.2 Forms of intellectual property protection**

The main legal forms of IP protection are: patents, registration of brands, industrial drawings and models, and copyrights. There are other, non -regulated ways to protect intellectual property such as commercial secrets. They are sometimes more effective than the legal forms of IP protection.

### **5.2.1 Patents**

Generally speaking, a patent is a right given to an inventor (a person or enterprise) by a national organization for the protection of some kind of IP from use by others for a period of twenty years. In return for this protection, the inventor must disclose the mode of functioning of his invention. In general patentable inventions are those that pertain to industrial processes, machines, manufactured goods, chemical or pharmaceutical formulas (molecules) and even new varieties of plants. In many countries, certain kinds of software applications can be patented, although the definition of patentable software varies. Ideas or services, however, cannot be patented. If a business finds a new method to commercialize its products, the only way to protect this innovation is to implement it as quickly as possible so as to avoid being imitated by competitors.

To be patented, an invention must be unique compared with what is already in the marketplace, and it must have concrete applications. An innovation that has no function is not patentable. The procedure for obtaining a patent has multiple steps and can be quite expensive. Although the process varies by country, there is generally a national organization that oversees patent applications. The first step in applying for a patent is for the inventor to undertake a process called “due diligence.” This involves searching databases of existing products and patents to

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make sure the invention is indeed original and does not overlap with an existing patented item. Patent attorneys are often consulted at this point because they have experience in determining whether an invention is patentable. Since descriptions of new patents are published only after they have been issued, the inventor must continue to search for similar items right up until his or her own invention receives a patent.

Once it has been determined that an invention is both usable and original, a patent application, also called a patent claim, can be submitted. Often written with the help of a patent attorney, a patent claim contains a detailed description of the invention and why it is unique, drawings that illustrate the invention, and a declaration that the inventor believes that the invention has not yet been patented or produced for the marketplace. Along with these written materials, a fee must be paid. The amount can vary depending on whether the inventor is an individual or a company. In addition to an initial registration fee, other fees can be imposed later in the lifetime of the patent.

The reason to undertake the expensive and time-consuming process of obtaining a patent is that the patent holder is granted an operating monopoly during the period of patent protection. During this time, the patent holder also has the right to license others to use the patented invention for a fee. In addition to this advantage, a patent can make it possible to raise funds from capital investors when the patent holder can show that the patent conveys a competitive advantage over existing technologies or products.

The main disadvantage of a patent is that the patent holder must disclose its functioning, information that could be useful to competitors. The protection provided by the patent has a limited time. Furthermore, when technology is evolving quickly, as is the case in many sectors, a patent may be quickly overtaken by new inventions. For a patent to be truly effective, it must reach beyond national borders so that the protection extends to as many countries as possible. This multiplies the fees involved and can become quite expensive.

Because the cost of obtaining a patent is significant and the process can take several years, an entrepreneurial firm should answer the following questions before it decides to apply for a patent.

1. Is the invention a unique solution and measurable improvement over the present state of the art?
  2. How large is the potential market of the innovation and how attractive are the incentives for the customer?
  3. How long will it take to bring the new product or process or service to market?
  4. How easy will it be to manufacture the product or deliver the service?
  5. How strong is the actual and potential competition, and what will be their reaction?
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6. If the patent is granted, is it enforceable?

To maximize the probability of success and minimize the expense of obtaining a patent, the following sequence of activities is recommended:

1. The inventor should keep a detailed diary, recording all technical activities and results.
2. A search should be made to make sure that the invention is new.
3. An enabling disclosure should be prepared as the basis for the application.
4. The application should be filed before publication of any relevant scientific or technical results.
5. The inventor and his or her legal representative should respond promptly and completely to the requests of the patent office.
6. Once the patent is issued, it is valid for 20 years from the date the application is filed, not from the date it is issued.
7. Regular payments must be made during the 20-year period to maintain the validity of the patent.

### **5.2.2 Trademarks, brands, industrial drawings and models**

A trademark is a word, phrase, distinctive sign, symbol, logo or drawing that distinguishes the goods and services of an enterprise from those of its competition. Examples are the Swoosh on Nike sportswear and the red tab on the back pocket of Levi Strauss jeans. Unlike patents, trademarks can be renewed for as long as a product is being manufactured.

A brand can be an important capital for the enterprise it names. When a brand is firmly rooted in the mind of consumers, it creates a barrier to the entry of lesser-known products and increases the value of the better-known brand. Companies can protect their brands by registering the brand name with an intellectual property protection organization. Registering the brand protects it from being used by other companies. In Tunisia, this registration process entails a search for antecedence to ensure that the brand is available and then registration with a government office. A brand can be protected for 10 years and renewed indefinitely.

Industrial drawings and prototypes can also be protected by filing for a patent through an industrial protection organization. This protection is granted in Tunisia for time periods of 5, 10 or 15 years.

In the United States, a trademark (or a service mark for services) is fairly easy and inexpensive to obtain from the U.S. Patent and Trademark Office (USPTO), according to the following rules.

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1. The name must be used or intended to be used in commerce.
2. The symbol ® after a name shows that the name is a registered trademark in the USPTO. The symbol ™ shows that a company claims rights to a trademark but that the name has not yet been registered in the USPTO. A registered service mark is denoted by the superscript ℠.
3. The name is initially registered for 10 years and can be renewed for as long as the company continues to use it.

One of the first steps an entrepreneurial firm should take is to register its trademark so it will have the right to sue and recover damages if another company uses its registered trademark name. The cost of registering a trademark is outweighed by the benefits of brand recognition and marketing opportunities, which can allow a company to charge higher prices for products that carry its trademarked brand. Counterfeit products, those that illegally display a registered trademark, can be seized and destroyed.

### 5.2.3 Protection of literary and artistic property

Original works of literature, cinema, theatre, music, photography, clothing and furniture design, software, and other intellectual products are also protected against being copied and sold. While every country has its own rules for intellectual property protection, there is a trend towards unification of international conventions. In the United States, for example, the protection of intellectual works, such as literature, lasts 70 years from the death of the author, while in Tunisia this protection lasts 50 years after the death of the author.

### 5.2.4 Trade secrets

A trade secret is any formula, material, process, technique or algorithm that conveys an economic advantage to the company that possesses it and that obtains its value from being kept secret. The owner of the trade secret must show that reasonable efforts have been made to keep the information secret, for example by marking records “company confidential,” by keeping them under lock and key and by limiting access. Entrepreneurial companies should keep secret any information that would harm their competitive advantage if it becomes known. If a trade secret needs to be disclosed for business or commercial reasons, the receiving party can be asked to sign a “non-disclosure agreement,” which specifies that the secret information can only be used for specific purposes (for instance, investing in the firm) and cannot be disclosed to others outside this purpose.

Some businesses prefer to protect their trade secrets rather than to file for a patent. This is what Coca-Cola has done. The formula for its fizzy drink is known by only three people at any time and is safeguarded at Coca-Cola headquarters in Atlanta, Georgia. Because the drink was launched in 1886, it would have run the risk of becoming public property in 1906 if it had been protected by a patent. Because the formula for Coke is a trade secret, over a century later it remains a mystery, much to the delight of Coca-Cola shareholders.

The disadvantage of using commercial secrecy instead of a patent to protect intellectual property is that even the best-kept secrets can sometimes become public knowledge. To prevent this, a reliable and expensive apparatus to ensure secrecy must be created, for example, requiring that employees who know the trade secret sign confidentiality agreements.

### **5.2.5 Other forms of intellectual property protection**

Apart from trade secrets, there are other ways to protect intellectual property that are not provided for by the laws of a country, but that can nonetheless work efficiently. One way is to be a first mover in a particular field. Being the first to move into an industry can convey considerable competitive advantage over competitors and imitators who lag behind the first movers. One case that illustrates the advantage of being first took place in the retail book industry. The primary U.S. bookseller until the mid-1990s was Barnes & Noble, which had hundreds of stores across the country. Barnes & Noble, like other book retailers, did not foresee that a new method of distribution was about to be born: the Internet. In 1994, Jeff Bezos created Amazon.com, an online bookstore. Barnes & Noble tried to catch up with this new method of retailing, but Amazon was too far ahead. The first one to arrive in the e-commerce marketplace—Amazon.com—was able to protect its economic model, not through patents or copyrights, but by being the first to gain experience in this kind of selling. Amazon is now known around the world as a seller of diverse products whereas its rival Barnes & Noble is practically unknown outside the United States.

In some businesses, however, it is more useful to be an imitator than a first mover. Imitators can learn from the mistakes made by the first movers and profit from their experience, and thereby leap to a leadership position in that business.

## **5.3 Protection of intellectual property in the Maghreb**

In the past few decades, Morocco, Algeria and Tunisia have proposed specific legislation to protect intellectual property. In Tunisia two public agencies have been entrusted with this task: the National Standardisation and Industrial Property Institute and the Tunisian Organization for Copyright Protection. Algeria and Morocco also have public organizations that protect industrial property: the Algerian Industrial Property Institute and the Moroccan Office of Industrial and Commercial Property, as well as the National Office of Authorship and Related Rights in Algeria and the Moroccan Copyright Office. All three countries have signed the major international conventions on intellectual protection. Patents are protected for 20 years before they become public property, and copyrights are protected for 50 years after the death of the author.

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## 5.4 Obtaining international IP protection

Given the limited local market, entrepreneurial firms in the Maghreb will need to expand their business internationally, through exports, foreign subsidiaries and international joint ventures. While obtaining trademark and copyright protection outside the Maghreb is relatively simple, international patents are more difficult and much more expensive to obtain. The following steps summarize the recommended procedure for obtaining copyright protection in countries that have signed the Patent Cooperation Treaty (PCT), including the United States, Western Europe, South Korea, the Maghreb, but not Taiwan and a few other small countries.

1. An international patent application is filed with the national patent office or with the international bureau of the World Intellectual Property Organization (WIPO) in Geneva.
2. The application is subjected to an international search, which is carried out by one of the major patent offices appointed by the PCT. The search generates an international search report, that is, a listing of citations that might affect the patentability of the invention. At the same time, a written opinion of patentability is prepared.
3. The applicant decides to either pursue or withdraw the application. If the applicant continues, the application and the international search report are published. (The written opinion is not published.)
4. The applicant has 18 months to decide whether to seek protection in other countries.
5. Separate applications must be filed in each country where patent protection is sought, for instance in the United States, as discussed in Section 5.2.1 above. A European patent can be filed, but it must be deposited in each country of interest. Depending on the country, approved translations into every country's language may be required, along with additional payments.
6. International patents are valid for 20 years from the date of filing and are subject to maintenance fees.

Entrepreneurial firms in the Maghreb that have developed innovative technical products are advised to file, as soon as possible, an international patent application according to the above procedure. The cost is relatively low and the search report is usually available within 18 months. Depending on the confidential opinion of patentability, the firms can decide whether to apply for a patent, and in which countries, depending on their worldwide marketing strategy.

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## 5.5 Conclusion

Intellectual protection is an important leverage tool to encourage innovation in economic and artistic domains. There are several ways of protecting the innovators and creators. Patents, registration of brands and industrial drawings and copyrights are the main tools available to protect intellectual property from being copied. A series of conventions, national and international organisms monitor the respect of the rules of protection which tend to become standardized due to the effects of globalization. The countries of the Maghreb form part of this logic by setting up a framework for intellectual property protection which is close to international regulations.

## 5.6 Case Study: Tiger Smith's Café and the tiger emblem<sup>24</sup>

### 5.6.1 Introduction

This case, based on actual events, illustrates the importance of establishing and registering a business trademark after researching any possible conflicts that could arise if the proposed trademark is similar to existing registered trademarks. The case also shows that any business, no matter how small or how different from a trademarked business, is subject to unpleasant and costly infringement penalties.

### 5.6.2 The two contestants: Tiger Stores, Inc. and Tiger Smith's Café

Tiger Stores, Inc. is a multinational company that markets and services bicycles and motorcycles. An artist designed their recognizable tiger emblem in 1975 and registered it as a trademark that same year.

In 1970 George J. Smith opened a small café in a working-class neighborhood of Pittsburgh, Pennsylvania. It had a few tables and some arcade games. Since his birth in 1920, the proprietor had been called Tiger by his parents and his friends. Therefore he named his business "Tiger Smith's Café." In 1980, a patron offered to paint a tiger's head on the front wall of the café. The tiger's head was red on a white background and looked similar to the Tiger Stores emblem, which was black on white.

### 5.6.3 The notice of infringement and negotiations

Apparently, some people driving by the café noticed the similarity between the two emblems and notified Tiger Stores. The trademarks coordinator of the company wrote a formal letter to George J. Smith, notifying him that his "unauthorized use of our mark constitutes trademark infringement and unfair competition... Unless Tiger's Café immediately and permanently ceases and desists its unauthorized use of our company's TIGER HEAD Design trademark... within ten days... we will recommend to management that legal action be taken to protect our company's rights."

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Tiger Smith was flabbergasted when he read this letter: how could his humble café, started before Tiger Stores was founded, be guilty of “unfair competition?” He appealed to the Tiger Stores CEO, stating, “It is unconceivable that anybody would confuse my emblem and café with the Tiger Stores” and asking that no further action be taken against him. He received a reply from an official, offering to close the file if Tiger would agree to replace his emblem, within the next three to six months, with something “that not only you can be proud of but we will be happy too.”

Tiger’s friends and customers urged him not to accept the Tiger Stores “solution” and enlisted the support of the media. The newspapers claimed that this episode was a typical attack by big business against the little guy. Visitors and TV crews came to the café, which became famous for a short time, but soon the interest died out. Tiger was still facing the Tiger Stores deadline with the threat of litigation.

### 5.6.4 Tiger Smith’s choices

Tiger Smith, a former boxer, considered several choices, ranging from fighting to the finish to acquiescence and withdrawal.

1. Fight in the courts. Tiger Stores had a registered trademark, Tiger Smith did not, so the courts would probably rule against him. Besides, he did not have the financial means for protracted litigation.
2. Do nothing and wait for Tiger Stores’ next step six months later. By that time, the media attention would be forgotten, and Tiger Stores would pursue litigation. Their lawyers were possibly concerned that if they let Tiger’s café use their trademark without authorization, they would be setting a precedent for similar use by real competitors. Thus, this choice would just delay the decision.
3. Whitewash the café wall and replace the contested emblem with a different one, as suggested by Tiger Stores’ second letter. This would cost some money and imply defeat.
4. Whitewash the wall and forget the whole thing. Tiger was 60 years old and planned to retire in five years. This appeared to be the simplest and least expensive solution.

### 5.6.5 Conclusion

Readers can decide which choice they recommend for Tiger. The real lesson is that this episode could have been avoided with better foresight and planning, following three simple steps.

1. Before painting the wall Tiger should have researched trademarks featuring tigers, tiger cubs and other felines.
  2. If he had found a similarity with his proposed painting, he could have told the painters to avoid any resemblance that might cause confusion.
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3. Even if he had not taken the first two steps, he should have attempted to register his own trademark. Most probably, the similarity would have been brought to his attention during this process, and he would have made the necessary changes.

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# CHAPTER 6: LEGAL, TAXATION AND SOCIAL SECURITY ISSUES

## 6.1 Introduction

Creating a business raises legal, taxation and social security issues related to, among other factors, the modality of association, the responsibility of the management and remuneration. Choosing a legal entity for a business can turn out to be crucial from a financial and taxation viewpoint. Each kind of entity has advantages and disadvantages. Many people who create a business neglect these aspects when launching their project and only realize the dangers when it is too late. In the legal, taxation and social security domains, each country has its own rules for businesses, although there is a trend towards harmonization on an international level.

## 6.2 Legal issues of setting up a business

When a business is being set up, the founders should ask themselves a series of questions. Should other partners be associated? What is the minimum capital required to set up the business? Who will run the business and make decisions? Where does the managers' responsibility begin and where does it end? In the case of problems or failure of the business, is there a risk for the private assets of the entrepreneurs? These and other questions require that the entrepreneurs recognize the consequences of choosing the legal form of their business since this will affect their assets and their project's sustainability. In most countries, the choice is to have a business with either one associate or with several, a partnership, a joint-stock company or a hybrid company. Each type of company has its own rules, as well as its advantages and disadvantages.

In Morocco, Algeria and Tunisia, there are generally three types of companies:

- a partnership;
- a joint-stock company;
- a limited liability company.

### 6.2.1 A partnership

Partnerships are based on "*intuitus personae*," the legal concept from ancient Rome that means that the choice of a partner is based on personal knowledge of his or her identity and reliability. In other words, the partnership's risks are reduced because every partner can be vouched for by the other associates. There are two main types of partnerships: a general partnership (in French, *Société en Nom Collectif* or SNC) and a limited partnership.

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### 6.2.1.1 General partnership

A general partnership (SNC) is “a company which is run with a company name and which is composed of two or more persons who have joint and personal responsibilities for the company’s liabilities.” It is characterized by the personal quality as traders of the associates and the indefinite and collective responsibility of each associate for the company’s debts. The management of a general partnership legally concerns all the partners, who may however entrust the management to one partner or to a person outside the company.

### 6.2.1.2 Limited partnership

A limited partnership is a company that does business under its own name and that comprises two categories of associates: active and limited. Active partners are traders who are jointly and collectively responsible for the company’s liabilities. They are the only ones entitled to manage the company. Limited partners are not traders and their responsibility is limited to their financial contribution to the company. A limited partnership is a way of doing business that has been used for a long time by those who do not want to be engaged in the daily responsibilities of the business or who want to limit their potential losses to the amount of their financial contribution to the business.

## 6.2.2 Joint-stock company

In contrast to companies based on *intuitus personae*, or personal acquaintance among partners, joint-stock companies are based solely on financial participation by shareholders. This means that shares can be freely transferred as a measure of participation in the share capital. There are two kinds of joint-stock companies: limited-liability companies (SA) and partnerships limited by shares (SCA).

### 6.2.2.1 Limited liability company

A limited liability company (*Société Anonyme* or SA in French) is a company composed of at least seven persons in Tunisia or five in Morocco—the shareholders—who own shares and are responsible for the company’s liabilities only to the extent of their contributions.

Limited liability companies have a board of directors which nominates one of them as the chairman of the board and chief executive officer (CEO), who is responsible for the general management of the company. The company statutes may, however, dissociate the function of the chairman of the board from that of the CEO. In this case the CEO may not be a board director.

In 2000 the Tunisian Company Code introduced a possible new formula of management: a board of directors (collegial administration) with a monitoring board instead of a board of directors.

In Algeria, the equivalent of the Moroccan or Tunisian limited liability Company is known as a joint-stock company (SPA).

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### 6.2.2.2 Partnership limited by shares

A partnership limited by shares consists of one or several active partners and one or several limited partners. The active partners are jointly, collectively and indefinitely responsible (involving all their assets) for the company's liabilities, whereas the limited partners are responsible only to the extent of their contributions. The shares of the active partners are not negotiable, whereas the shares of the limited partners are negotiable.

### 6.2.3 Private limited company

In a private limited company, none of the associates is responsible for more than his/her financial outlay, according to the Tunisian Company Code. This is a hybrid type of company in the sense that, like a joint-stock company, the associates' responsibility is limited, and like a partnership, it is forbidden to create negotiable shares, and the rules for setting up and running the company are flexible. A private limited company may engage in many kinds of business, but not in insurance, capitalization of savings, banking and credit activities.

### 6.2.4 Other legal forms

Apart from the major kinds of companies described above, there are other kinds that better suit small-scale entrepreneurs like the individual enterprise (the most common form in Tunisia), the one-person company with limited responsibility (known as a SURL in Tunisia) and the one-person company (known as a EURL in Algeria).

When entrepreneurs need venture capital to strengthen their company's equity, the venture capital holders often demand that there be a joint-stock company or a limited liability company (or its Algerian equivalent, the joint-stock company SPA). These forms of businesses have higher requirements for transparency and good governance compared to other legal formulations. They have a board of directors (where representatives of the venture capital companies could sit), they must choose one or several auditors (and thus have certified accounts) and they often have committees for auditing, remuneration and ethics.

## 6.3 Tax system involved in setting up a business

The legal form of a company that is chosen has taxation consequences for the business. In Tunisia, for example, the salaries of the majority share-holding managers of limited liability companies (SARLs) are not deductible from expenditures when calculating the corporate tax at the end of the fiscal year.

In general, a distinction has to be made between direct and indirect taxation. The former is linked to the profitability of the enterprise as in the case of corporate tax (also known as tax on profits in some countries), while the latter depends on the level of activity (sales, imports, etc.). In some countries, the corporate tax rate is

uniform and does not vary according to the stages or level of activity. In Tunisia, the ordinary rate of taxation is 30% for most companies and 35% for some activities (banks, telecoms, energy, etc.). In order to encourage activities like exporting, renewable energies, regional development, etc., the Tunisian government grants tax reductions and even tax exemptions for up to the first ten years of the business. The government also grants other tax reductions if part of the profits are reinvested in the business or in new projects. In Tunisia, the average tax burden is 21% because of these exemptions and other benefits given to companies.

Taxation in Morocco and Algeria is similar to the Tunisian model even if there are differences in the rates. Most companies in Algeria are taxed 30%. In Morocco the rate is 35% for most companies and 39.6% for credit and insurance businesses.

In all three countries individual entrepreneurs are taxed depending on their income bracket. The maximum rate of income tax is 35% in Tunisia, 40% in Algeria and 44% in Morocco. Furthermore, the distribution of dividends is not taxable in Tunisia, whereas in Morocco there is a 10% deduction at the source.

Apart from these direct taxes (corporate tax and income tax on physical persons), Algeria, Morocco and Tunisia have a series of indirect taxes, the most important of which is the value-added tax (VAT). Its rate varies from 0 to 17% in Algeria, 0 to 18% in Tunisia and 0 to 20% in Morocco, depending on the products and activities. The maximum rates represent the standard rate in the three countries, while the minimum rates are the exception.

The main legal forms of corporation in Tunisia and their fiscal impact are summarized in Table 8.

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**Table 8. The main legal forms of corporation in Tunisia and their fiscal impact**

	Individual Company	SURL	SARL	SA
Number of associates	1	1	minimum 2	minimum 7
Minimum capital	-	-	-	5000 dinars (50,000 dinars for firms involved in savings)
Manager	Individual entrepreneur	Manager - entrepreneur	Manager (associates or third parties)	CB & CEO (board of directors with 3 to 12 directors) monitoring board and board of directors
Decision-making body	Sole entrepreneur	Manager	Manager, AGO* & AGE**	Managers, AGO* & AGE**
Responsibility of Associates	total & indefinite	limited to contribution	limited to contribution	limited to contribution
Responsibility of Managers	civil & penal of head of enterprise	civil & penal of head of enterprise	civil & penal of head of enterprise	civil & penal of head of enterprise
Deduction of remuneration of manager	No	No	Yes, if manager does not own the majority of shares	Yes

\*AGO: ordinary general assembly

\*\*AGE: extraordinary general assembly

## 6.4 Social security

Every country has its own system of social security. Some have opted for a compulsory system, like the three Maghreb countries, which have similar rules although the social contribution rates differ. The social security systems of Tunisia, Algeria and Morocco cover an array of services such as family allowances and retirement pensions, health insurance, unemployment insurance and old age. Financing for these services comes from contributions by businesses and by salaried employees. The businesses make their contributions into social security funds. Entrepreneurs in some countries, like Tunisia, have the possibility of choosing a plan for independent salaried people and thus would pay into the social security funds directly. The compulsory contributions from businesses and salaried employees vary from 24.32% of gross salary in Tunisia to 35% in Algeria and 24.39% in Morocco.

All three countries allow businesses exemptions from social security contributions (up to five years in Tunisia) if they recruit graduates of their country's universities. They also impose a minimum guaranteed wage in different economic activity sectors. In all three countries, it is possible to buy additional life insurance policies, and certain fiscal advantages are granted to those who take out life insurance policies.

Tunisia and Morocco have also set up stock option plans especially for technological firms so that they can retain their best salaried employees. Unfortunately these plans are not well known and are little used by businesses.

## **6.5 Conclusion**

Businesses have legal, fiscal and social security responsibilities that have a considerable impact on their activities. The choice of a legal structure will affect the role of the entrepreneur in terms of fiscal responsibility and governance. The countries of the Maghreb have instituted legal, fiscal and social frameworks that regulate the activity of entrepreneurs, businesses and salaried employees. These frameworks tend to become standardized across the three countries even when there are differences among the countries' business practices.

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# CHAPTER 7: THE BUSINESS PLAN

## 7.1 Introduction

Every project begins with an entrepreneur's vision. But simply having an idea for a project does not mean that an entrepreneur knows how to implement and develop it. The person with the good idea might not be the right one to turn it into a viable project. Being a successful entrepreneur requires both technical and management skills. At the same time, someone who is a skilled manager or engineer is not necessarily a skilled entrepreneur. For an innovative project to be successful, an entrepreneur needs a strong personality, vision and multi-disciplinary technical and managerial competence.

One of the best ways to judge this range of aptitudes is to analyze the business plan for the new project and to judge whether it addresses the issues that either ensure its success or lead to its failure. The business plan has become a kind of universal language that entrepreneurs, investors and bankers use when discussing potential new projects. A good business plan does not provide insurance against failure. But it does reduce some of the risk of failure. In fact research shows that projects initiated with a business plan generally fare better than those without one. According to Sahlman, investors use a business plan to evaluate four interdependent and crucial factors in each investment opportunity: the people involved, timeliness (environment, trends, inflation etc.), risks and remuneration.

## 7.2 Business plan objectives

Contrary to common wisdom, a business plan is useful not simply for obtaining credit with a bank or raising capital from investors. It is first and foremost a compass to be used by the entrepreneur, a kind of road map that indicates the best possible route to success. In an ever more globalized and turbulent environment, drafting a business plan is a requirement for assessing the risks involved in launching a project.

Writing a business plan allows entrepreneurs to express their vision and ambitions in concrete terms. During the writing process, ideas become more organized and anxieties are thereby diminished. The business plan delineates the ins and outs of the project and how it will be set up. Many people associate business plans with the creation of an enterprise, but this is not the only time when it is useful. Throughout the life cycle of a business (development, restructuring, merger, acquisition, etc.), the business plan can be used to plan future steps and update strategy.

Furthermore, a business plan is never static. It is a living document that should be regularly updated as operations are implemented and changes are taking place on a

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micro, macro, national and international level.

The business plan reflects the vision of the entrepreneurs translated into action. Of course the business plan is also a communication tool to be used with bankers, venture capitalists, business angels, public bodies and potential stakeholders. And like any communication, it must appeal to those reading it by capturing their interest and convincing them to be part of the venture by investing their money or efforts.

Experienced capital investors (business angels and venture capitalists) as well as the organizations that support new businesses have seen a multitude of plans from many sectors. They have also seen numerous projects succeed and others, just as numerous, fail. They have thus learned to read business plans in a detached manner and to be careful about handing over money. This leads to an asymmetry between enthusiastic entrepreneurs who dream of success and jaded investors who are more cautious.

The business plan must therefore be able to convince and even to impress its audience. This requires a talent for communication, both written and oral, in order to overcome the caution of the investors and bankers.

Preparing an impressive business plan is also the best way to convince potential employees to join the team, perhaps even to leave comfortable positions at other businesses. The plan must therefore communicate both enthusiasm and a compelling vision.

In summary, the business has four objectives:

- To be a dynamic road map and a formal expression of the entrepreneur's vision for the project;
- To serve as a tool for communicating with investors, bankers and organizations that offer non-financial support;
- To communicate a credible objective;
- To attract talented collaborators to the business.

### **7.3 Structure of the business plan**

The format and content of business plans has become standardized throughout the world, understood by the community of entrepreneurs, funders and potential collaborators. Entrepreneurs who want to use a business plan must therefore understand and conform to this standardized structure.

First, it should be as brief as possible, concise, to the point and easy to understand because investors receive more plans than they have time to read. Although the

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ideal length is not defined, there is agreement that a business plan should not exceed 40 pages. John Cavalier, former CEO of Mapinfo and current business angel, stated that he prefers a ten-page business plan if it provides a precise description of the project.

The format must be clear and organized so that the content is easy to find. The sections should be organized in a hierarchical order, with the key points emphasized. Since this is a business document, the style should be businesslike, i.e. unembellished and legible. The writing style should be engaging in order to capture the readers' imagination, but also factual in order to present an accurate picture to shrewd potential investors. Finding this balance can be a challenge.

It is also advisable to adapt the business plan to each type of reader since the interests of a banker are not the same as those of a venture capitalist or a business angel. Bankers are more interested in repayment of loans and collateral, whereas venture capitalists and business angels are more interested in the personal qualities of the founders and the team, potential added values and exit strategies. As the Arab proverb advises, "You must talk to people in the language they understand."

The entrepreneurs need to prepare their business plan themselves because they know it best. Depending on their training and professional experience, they can draw on the expertise of various consultants, such as editors, bankers or lawyers so that the plan conforms to professional standards. An engineer with no training in management might write down his vision and his strategy for the project and then consult experts for those parts of the plan that require specialized know-how, for example, in finance, marketing or accounting.

The most common weaknesses of business plans usually reflect the training of the writer. Engineers tend to place too much emphasis on product data and not enough on how to launch the product, while finance experts tend to overemphasize the financial data of the project. To prevent these imbalances, the business plan should include the following components:

- An introduction;
- A section on the product, comprising the market, strategy, marketing, management and human resources;
- A section on financing and profitability;
- Appendix.

Even if the project's viability and profitability are the essential considerations, the format of the business plan will affect how sponsors and other stakeholders judge it.

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## 7.4 Contents of a business plan

According to Baron and Shane, a good business plan must respond to the following questions:

- *What?* A detailed description of the nature of the project, the product, the market, technologies, etc.
- *Why?* The project must respond to the needs of the marketplace. The business plan should highlight these needs and show that the proposed project meets them better than existing products do.
- *How?* The plan should go into detail about setting up and managing the project and its strategy and commercialization policy.
- *Who?* The education and business experience of the founders and major collaborators should be outlined.
- *How much?* A description of investment costs and profitability elements as well as the financial package is an indispensable part of the business plan.

The business plan should include these sections:

- Cover page
- Table of contents
- Executive summary
- Market opportunities and analysis
- Description of the products
- General strategy
- Marketing strategy
- Methods and organization
- Human resources
- Financing and profitability
- Appendix

## 7.5 Introductory section

This section should entice the readers to continue reading the business plan. It includes the cover page, the table of contents and the executive summary.

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### 7.5.1. Cover page

The cover page must include the following elements

- The title of the business plan
- The name of the enterprise
- The logo
- The names of the entrepreneurs
- Contact information: address, telephone, fax and email

### 7.5.2 Table of contents

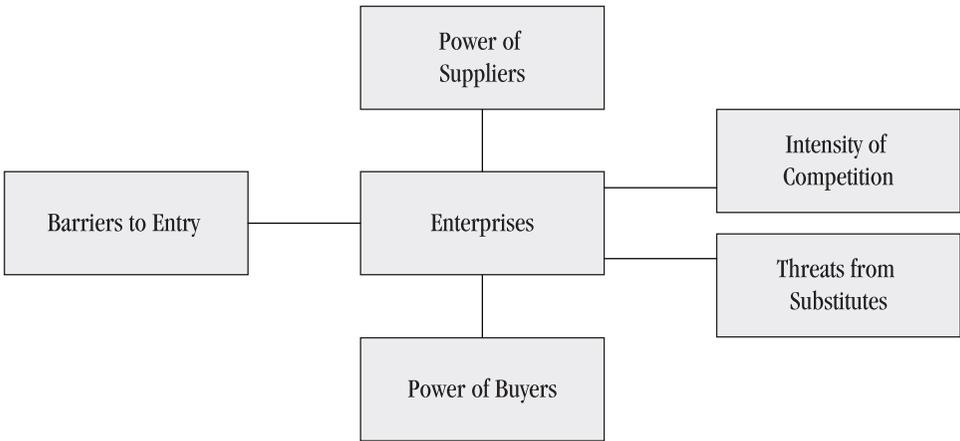
### 7.5.3 Executive summary

The executive summary should capture the interest of a busy reader by immediately answering the questions: what? why? how? who? how much? No longer than two or three pages, it should provide concise information while also conveying enthusiasm for the project. Often investors decide whether to continue reading the business plan on the basis of the executive summary.

## 7.6 Market analysis

The market analysis describes the market sector in which the project will operate. The market analysis should justify the opportunity that the entrepreneur intends to seize. This opportunity could consist of unmet or insufficiently met needs that the new or improved product or service would fulfill. In this section of the plan, the entrepreneurs must show they have researched their market via market studies, questionnaires, surveys, primary data, secondary data, etc. But a market analysis is not a market study. If a large amount of detailed information about the market is available, this should be included in the appendix. The market analysis should describe the main characteristics of the market: barriers against market entry, competition, substitute products, other stakeholders like suppliers and buyers, the market potential, its growth rate and the market share of competitors.

One of the clearest ways of understanding these various factors is Porter's model of five forces, as shown in Figure 5. He provides a check list of elements to be considered in evaluating an industry.

**Figure 5. Porter's five forces**

### 7.6.1 Barriers to entry

There are many potential obstacles facing an entrepreneur. Among the main ones are:

- **The advantage of absolute cost.** The project should be innovative enough to obviate this obstacle as shown in the data gathered about potentially competitive businesses. Obtaining funding for product development could also be problematic.
- **Economies of scale.** Companies that are established in their sector have already benefited from economies of scale so their cost structure is more favorable than that of newcomers.
- **Requirements in capital.** Technological businesses are particularly capital avid and thus at risk. Banks are often reluctant to finance such projects. But good projects with real prospects of profitability and viability are finding more and more capital financing from business angels, venture capitalists, government subsidies, etc.
- **Differentiation of products.** The quality, image, prestige and service associated with existing products could present serious impediments to competition for a new product.
- **Brand identity.** The products of established companies have a recognized brand identity that could impede newcomers from trying to enter that market. But truly innovative technological products often succeed in the end, even though there might be a delay of several years between their launch and their widespread diffusion. The telephone, TV, fax, electronic games, e-business etc. are often-cited examples of the eventual diffusion of technological innovations.

- **Evolution of costs.** Established businesses often enjoy a favorable cost structure because of experience and economies of scale, which can be an obstacle for entrepreneurs.
- **Access to distribution chains.** Established businesses must have a deep understanding of their distribution chains. The entrepreneur must have an accurate idea of the links in this chain so as not to be unpleasantly surprised when the project is launched.
- **Possible counterattack by existing businesses.** To survive, existing businesses must learn to protect their markets. Entrepreneurs should not expect to be welcomed with open arms when they try to enter a given sector. Even successful businesses have to fight this battle when they enter a new market. When Microsoft introduced the Xbox console in the video game sector, Sony, the current market leader, counterattacked by reducing the price of its PlayStation by almost 30% just a few weeks before the Xbox was launched. Because Sony had been in that market longer, it had a better cost structure. However anti-trust problems may arise if the company has a dominant position in the industry.

### 7.6.2 Threat of substitutes

Substitution products, while not identical to those currently on the market, can eventually fulfill the same functions. Economists sometimes refer to them as indirect substitutes. Often the substitution represents a technological innovation. For example computers have replaced typewriters and word processors, the fax has at least partially replaced the postal service, and faxes are being replaced by attached documents sent by email. More recently, free (or almost) telephone services such as Skype (acquired in September 2005 by eBay) have started to threaten established long-distance telephone services. The possible threat from substitution products should be dealt with in the business plan.

### 7.6.3 The level of competition

The business plan should give an accurate assessment of the intensity and nature of the competition. It should also describe whether the sector is concentrated or fragmented. These elements could be useful later on in defining a global strategy for the new project, how to position it in relation to the competition, and a pricing policy to launch the product(s) of the new project.

### 7.6.4 Power of the suppliers and the buyers

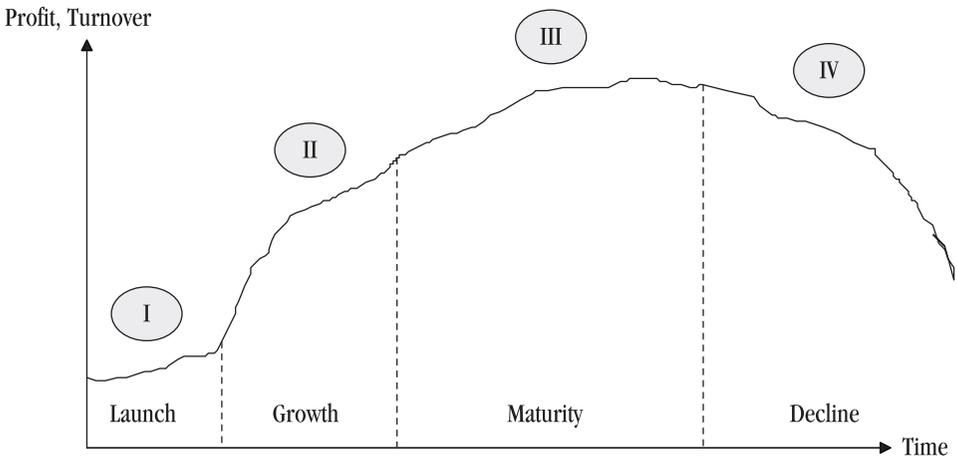
Entrepreneurs must demonstrate that they are aware of the economic challenges in the sector they want to enter. This involves understanding the relationship between businesses in a particular sector and buyers and suppliers.

In some sectors, the suppliers hold the real power as in the case of Microsoft and Intel which, thanks to the quality of their operating systems for the former and the microprocessors for the latter, have absolute sway in the informatics sector.

In most economic sectors which often have a production surplus capacity, it is the links in the industry's chain which are closest to the final client that hold the power and thus impose their conditions on the businesses upstream (their clients). Thus it would be useful for the entrepreneur to think in terms of the sector (industry) and not just on a micro-economic level (the enterprise and its competitors).

Entrepreneurs should also be aware of the state of maturity of the sector of activity because the key factors of success vary depending on the stage of the sectorial life cycle (Figure 6). Some sectors are in a stage of growth (e.g., biotechnology and the Internet) whereas others are in a stage of maturity (airlines, cars manufacturers, hotels) or decline (metallurgy).

**Figure 6. Sectorial life cycle**



The life cycle of an industry must not be confused, however, with the life cycle of a product. An innovative product can be launched whether an industry is growing, mature or in a state of decline. This is the case of low-cost air transportation, which is going through an expansion phase although the airline sector is considered mature. There are also profitable businesses in the declining metallurgy industry such as mini-steel works. A description of the current state of activity in the targeted sector could provide an argument in favor of the product that the entrepreneur wants to launch.

## 7.7 Products offered

Once the market analysis has been done, the entrepreneur needs to present the positive features of the proposed product. The product must address one or more needs of potential clients that have not been met or have been poorly met by

current products. The competitive advantages of the product should be listed, for example in terms of price, quality, functionality or time saved. An overview of possible R&D activity illustrates how the product might evolve over time. If there are any technical risks, this is the place to address them.

When the product is innovative, the entrepreneur must describe how to protect it through registering trademarks, patents, etc. (see Chapter 5).

## 7.8 General strategy

The business plan describes the medium- and long-term vision or general strategy for the business, expressed concisely. The French stock exchange site [boursorama.fr](http://boursorama.fr), stated its mission as “...becoming the specialist in financial information on the Internet.” This kind of clear statement also facilitates the future position of the business. The entrepreneur will thus be in a position to identify short-, medium- and long-term objectives in the business plan. These objectives should be organized in order of priority and followed by a strategy that will accomplish them. The strategy depends on the competitive advantages that the business claims to have.

According to Porter, there are two main sources of competitive advantage:

- Cost and production volume, and
- Differentiation (of quality, image, prestige, service).

This means that there are three types of strategy, depending on the size of the target market: leadership in terms of costs, differentiation and concentration. Porter warns against the temptation of mixing advantages when there is a large target, because the company could get “... bogged down in a median situation” in which the business can neither benefit from the cost advantages or from the differentiation advantages. But it is possible to benefit from these two sources of competitive advantage when the target market is small.

Choosing a strategy requires first segmenting the market into segments, next targeting one or several of those segments, and then establishing a basis for competitive advantage in that segment. With an innovative technological project, the ideal is build competitive advantage on the basis of differentiation rather than cost. Differentiation strategies make it possible to add a premium to the price that reflects the added value of the product compared with existing products.

In the business plan, entrepreneurs should enumerate the key factors for success. They must also demonstrate their strategic skills by describing the different stages of the business—from launch to “cruising speed” and beyond—by reviewing the prospects for the project such as partnership possibilities, listing on the stock exchange, globalization, etc. This part of the business plan is the place to highlight skills as a builder as well as confidence in the business, market and team.

## 7.9 Marketing strategy

This section of the business plan discusses how to position the product in the marketplace, including the details of the sales strategy.

The pillars of a marketing strategy are: product, price, promotion (advertising) and place (distribution), also known as the Marketing-Mix or the 4Ps in reference to the initial letters of the words. Because the product has already been described earlier in the business plan, this section discusses pricing policy, promotion and place (distribution). The entrepreneur should demonstrate an understanding of the cost of making the product, the price for selling the product, and the resulting margin (i.e., the difference between cost and price, or profit). The entrepreneur has two choices in setting a price. One is based on the cost of making a product, and the other is based on the value of the product to the customer. Ideally, price should be based on value delivered, which, with an innovative product, typically leads to a higher margin than does cost-based pricing. Cost-based pricing is more suitable for commodity-like products, which are indistinguishable in the eyes of the customer from competing products.

To promote the product, there should be a list, with a suggested budget, of promotional activities like advertising, press releases, promotional media, exhibitions, seminars and Web sites. A distribution system for the product also needs to be outlined, such as the sales force, market coverage, sales outlets and retailers, and internet sales, with the reasons for choosing one mode of distribution rather than another.

The definition of the target market share, pricing, promotion and distribution are together the basis for sales forecasts, i.e. the forecasted turnover that serves as the basic hypothesis for the financial section. It can be useful to include here a forecast of the time required to place the product on the market, a concept called the “time to market.” This forecast can be extremely useful in pinning down the cash flow because there is very often a time lag between the incoming and the outgoing funds.

## 7.10 Means used and organization

Once the marketing strategy has been presented, the entrepreneur can deal with the technical part of the business plan. This part explains in simple terms and without too much technical jargon the production process and product delivery (goods or services). If a particular choice was made in subcontracting or in choosing suppliers of equipment or raw materials or a technical partnership, then this should be explained as well. These production elements will make it possible for the entrepreneur to establish a checklist of his means of production and to obtain an estimate which can then be used to establish the investment plan. Readers also

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need to know about possible risks in connection with these technical aspects of the business. This section should be as simple as possible because the plan will be read by bankers or others who may not be familiar with the technical language.

Information for readers who would like to know more about technical issues, as well as topics like production cycle, production capacity, economies of scale, supply, sub-contracting and externalization can be included in the appendix. In the appendix, the entrepreneur could also include the pro forma invoices and technical exhibits pertaining to the means already acquired or to be acquired in order to ensure the smooth running of the project.

Once the technical aspects have been clarified, the entrepreneur can address human resources.

## 7.11 Human resources

With an innovative project, the team of managers and qualified personnel is especially crucial to the project's success. Investors prefer a talented, experienced and motivated team with an average project idea over an average team with an excellent project idea.

The entrepreneurial team must inspire trust. If they lack experience, they should stress their technical knowledge, practical training, confidence in the project, enthusiasm and their total commitment to the success of the project. The business plan should communicate these attitudes as well as the balance of skills among the team members. If engineers are behind the project, they should show that they have surrounded themselves with managerial competence in finance, marketing, etc. to ensure the project's success. Role sharing can be highlighted by, for example, drawing up an organizational chart where everyone's sphere of responsibility is clearly defined. If some skills are still missing from the team, then the business plan should say so clearly. The job profiles of the necessary personnel and their required skills should be defined.

A distinction must be made, however, between the project associates and the main collaborators. The qualifications of the main collaborators should be included as detailed CVs in the appendix. The contracts, remuneration, profit-sharing scheme and other benefits should be spelled out in this section. For associates, it is useful to mention the distribution of capital among them and to specify the legal form of the business. It is also useful to list here the names of consultant partners, independent auditors, lawyers and other outside experts to give more credibility to the business plan.

This part of the business plan must demonstrate the ability of the entrepreneur as an organizer and manager since these skills will determine who becomes the head of the business. Hormozi, Sutton, McMinn and Lucio advise that investors are more

interested in the implementation aptitudes (of projects) than in the product itself. They cite a famous venture capitalist, Arthur Rock, who stated, “I invest in people, not in ideas.”

## **7.12 Financial section**

One of the main reasons an entrepreneur writes a business plan is to obtain the necessary resources to develop a project. The financial section of the plan addresses the goal of finding the best possible financial package while demonstrating that the project is viable and profitable. It is therefore divided into two sub-sections: financing and profitability.

### **7.12.1 Project financing**

The previous sections of the business plan provided information such as the forecasted turnover, an investment plan and organizational and payroll structure. This information, taken together, provides the basic hypotheses that make up the financial section of the business plan. When evaluating business plans, bankers and investors evaluate these hypotheses with great care so they must be written as realistically as possible. Financial investors know from experience that entrepreneurs, especially new ones, tend to be overly optimistic when they present their projects.

The section on project financing contains the following general elements:

- A financing plan;
- Three to five annual profit and loss statements;
- A monthly cash flow plan for the first 12 to 18 months of operation;
- Three to five annual balance sheets.

Gathering these required data takes place over several stages. The ongoing or permanent requirements of the business that make up the planned turnover have to be estimated. A reliable estimate can be calculated by referring to the section on marketing. These assets are fixed assets such as equipment, computer equipment, transport equipment, etc. as well as and working capital requirements. Working capital is money that is always available to cover the necessary expenses of running the business (stocks, salaries for the first few months, client debts, etc.). The amount of working capital that needs to be available varies from one kind of business to another. With innovative and high-risk projects, the amount of working capital needed can be quite high compared with the total investment.

Once the investment needs have been estimated, they have to be compared to the stable resources available to the entrepreneurs, i.e., equity capital and medium- and long-term loans. Equity capital includes all the capital constituting the assets of the

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business, such as the personal resources of the founders (in cash or in kind), capital brought in by associates (including venture capital companies and business angels), donations and subsidies as well as quasi-equity (associates' current accounts, participative loans etc.). As for financing through debt, there are medium- and long-term credit and leasing. All these elements (non-current assets, working capital requirements, equity and debts) make it possible to set up the following investment schema.

**Table 9. Investment schema**

USES	RESOURCES
set-up costs non-current assets working capital requirements	capital associates' current accounts subsidies or premiums medium- and long-term borrowings

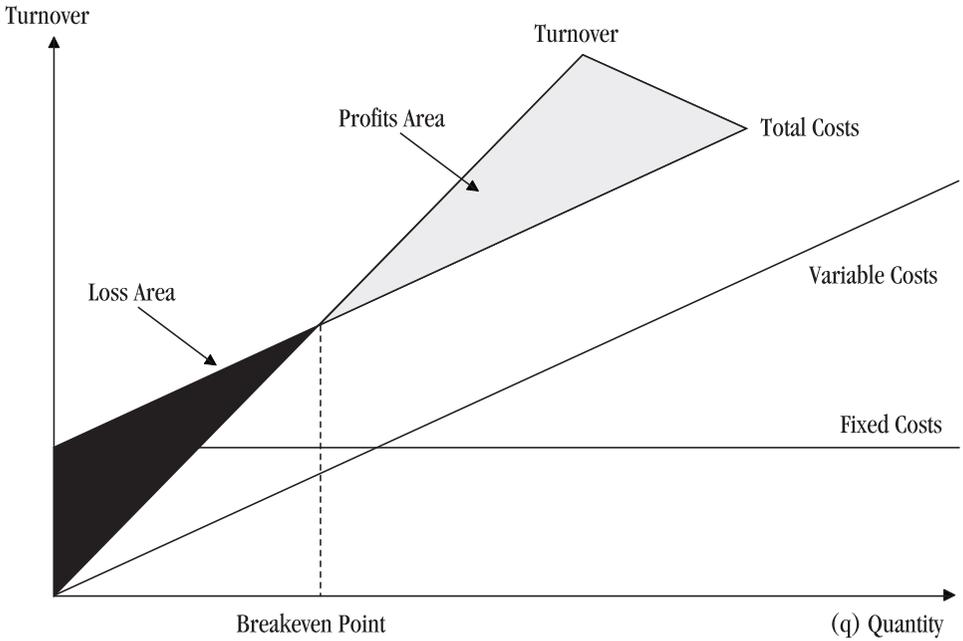
The forecasted working capital also needs to be assessed in order to estimate the operational results (products minus costs) and the business's capacity to generate self-financing over a period of three to five years. A monthly cash flow plan also needs to be established over a period of 12 to 18 months in order to avoid cash flow problems, since the gap between receipts and expenses is often the reason that projects fail.

Balance sheets for the first three to five years must be laid out in this section. The balance sheets can be used to create the indicators for the project's global profitability and give an idea of the business's financial evolution over the first few years.

If the entrepreneur is planning to include investors (venture capitalists or business angels) in the capital, then the financial section should contain the offer for the investors (the percentage of the capital to be opened with an estimate of their participation). These potential investors should be advised about how to harvest using several different modalities (direct transfer, initial public offering, etc., as discussed in Chapter 9).

### 7.12.2 Project profitability

The project viability indicators such as the profitability threshold, the internal rate of return, the recovery period and the net present value must be calculated in this section. The profitability threshold expressed in quantity or in value makes it possible to determine the point at which the business becomes profitable, as shown in Figure 7.

**Figure 7. Breakeven point determination**

FC = fixed costs

VC = variable costs

VCu = variable cost per unit

q = quantity

P = sales price

CA = turnover

BP = breakeven point (the point at which the turnover covers exactly the fixed costs and the variable costs)

Total costs = fixed costs + variable costs

Variable cost = variable cost per unit  $\times$  q

Turnover = P  $\times$  q

Calculating the net present value makes it possible to update the cash flows over several years and to deduct the initial investment. When the net present value is above zero, this implies that the project is profitable.

The internal rate of return is the level which makes it possible to even out the updated future net receipts with the investment expenses. In other words, this is the level which makes it possible to have a zero net present value for the project.

This is level (rate)  $i$  such that:

$$\frac{CF_1}{(1+i)} + \frac{CF_2}{(1+i)^2} + \dots + \frac{CF_n}{(1+i)^n} = Investment$$

With  $CF_1$  = cash flow in year 1

$CF_n$  = duration of project operation

The higher the internal rate of return compared with the current bank interest rate, the more reassuring the project will be for bankers and investors.

This presentation of profitability indicators can be further enhanced through an analysis that uses ratios: return on assets, return of equity, debt ratio, etc. It is also possible to use a sensitivity test to see, for instance, the impact of a 20 % reduction in the turnover and a 10 % cost increase on the project's overall profitability. In any case, the financial section (financing and profitability) must stress the project's financial logic and ensure that it is coherent with the other sections of the business plan because they serve as the basic hypotheses for this financial section.

## 7.13 Appendix

The business plan's appendix makes it possible to include details about the project that were mentioned in the body of the plan. This might be detailed CVs of the entrepreneurs and their collaborators, financial details, technical plans, estimates for the main equipment to be acquired as well as any other information deemed useful in showing the value of the project.

## 7.14 Presentation of the business plan

After the business plan has been written, the entrepreneurs still have important work to do. The bankers and investors who have been approached for funding will expect the entrepreneurs to defend their plan. This should be looked at as an opportunity to have direct contact with investors and to convince them to participate in the adventure represented by the well-prepared business plan.

Preparation for this meeting is crucial. The presentation should be as organized and engaging as the business plan itself. The story line of the project can be told briefly—a maximum of 20 minutes generally—from the project's inspiration to the crystallization stage. Some personality can shine through, especially confidence in the project and business sense, although without being aggressive. The focus of the

presentation is the essentials only. Complex technical details that could discourage investors should be avoided. It should also be assumed that the audience has not yet read the business plan in order to avoid a situation that could make anyone feel uncomfortable.

If a PowerPoint presentation is used, as is often the case, it is helpful to distribute paper copies of the presentation so listeners can take notes, which facilitate discussion later on. Some authorities recommend coming to the conference room early to check the projection equipment and audio system.

During the discussion the entrepreneur should be modest, never interrupt other speakers, listen, and accept any criticism since the listeners often have more business experience than the speaker.

## **7.15 Conclusion**

The business plan can be the “sesame” that opens the door of investors’ safes. It is not enough to have a good project to obtain financing. There are rules that must be followed when preparing a business plan that pay attention both to substance and to format.

## **7.16. Case study of an entrepreneurial venture: Carthago Marble Company<sup>25</sup>**

### **7.16.1 Introduction**

In 2005, while completing an MBA at South Mediterranean University School of Business, a team of graduate students decided to form a company called the Carthago Marble Company, or CMC. Their decision was based on the experience of the team members in the Tunisian marble industry and their belief that there were unexploited opportunities for Tunisia in the marble world market. Their proposed business plan focused on three areas: marketing, operations, and financing. Data for their business plan came mainly from local and foreign economic offices based in Tunisia, supplemented with important information found on the Internet.

### **7.16.2 Background: the world marble industry and Tunisia**

The marble industry comprises products that are made from ornamental stone and are used in construction, interior and exterior decoration and urban development. Considered a noble product, marble is classified as follows: crystalline marble, limestone marble, granite, and polished dull stone. Compared to other natural products such as wood, marble has a very long life and is easy to maintain, giving it an important advantage. Marble has long been a symbol of social status and a visual representation of a particular lifestyle.

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World production of marble has increased from 51 million tons in 1998 to over 70 million tons in 2007. Marble production is dominated by four countries that account for almost half of world production of marble and decorative stone. Italy and China are world leaders, each representing 16% of world production, Spain is third with 9% of world production, followed by India with 8%. The largest exporters of marble are Italy (20%), China (16%), India (10%), Spain (6%), and Portugal (5%). Compared to these countries, Tunisia is a smaller but significant producer of marble, and exports the majority to Italy, a Mediterranean country with close economic relations.

The Tunisian marble industry represents one-third of all businesses in the building material industry sector and employs over 2300 people. The industry consists of three types of activities: extraction of marble blocks, industrial machining and working. The majority of marble quarries are located in northwest and central-western Tunisia. Considering the growth in consumption of marble in Tunisia and the world, it is necessary to improve the production processes and increase national production capacity. This will require a substantial investment estimated at 40-50 million Tunisian dinars<sup>26</sup> (approximately \$27-34 million) to modernize production and provide professional training for personnel.

Tunisia's position in the international marble market is weak, but improving, and ranks third in Africa after South Africa and Egypt. Greater efforts to gain market share in all countries must be made with specific actions targeted to each country. In Tunisia, the fund for the access of export markets (FAMEX) contributes, with exporting incentives, to promotional activities designed to reinforce current exports of marble products.

### 7.16.3 The company and its products

CMC intends to produce and market marble products according to the following principles and strategies.

**Vision.** Marble is different from one country to another and is believed to be a part of the country's history and culture. Tunisian marble has its own unique characteristics that have become part of the country's cultural and historical values. It is the intention of the company founders to bridge the gap between civilizations and cultures by first introducing Tunisian marble into the Spanish market and ultimately to the European, U.S. and global market.

**Mission and Products.** While the primary focus will be to export marble initially to the Spanish marble market, a secondary goal will be to sell the products in Tunisia. The marble produced in Tunisia is a natural product used mainly in construction for covering floors and walls, but also by artists for sculpture and for outside furniture. Physical characteristics of the Tunisian stone are different in several ways from the marble produced in other countries. The marble has a variety of colors including several clear colors such as cream and grey. While Tunisian marble is thought to be especially beautiful, it is also functional and easy to use.

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**Potential Clients and Competitive Advantage.** Initially the company intends to export marble blocks and manufactured products to customers who produce and/or sell marble products in other countries, specifically Spain. Ultimately, it is expected that they will sell their products, both blocks and manufactured products, within Tunisia and abroad to dealers (distributors), stone company manufacturers, and private building companies (contractors). CMC intends to emphasize the unique color and quality of its product supplemented with high-quality services and competitive prices based on low-cost operations.

**Carthago Marble Leadership.** Initially, the company's key position will be staffed by the founders, all of whom have completed the MBA program at South Mediterranean University School of Business (MSB), Tunis, Tunisia, and have had many years of experience in the marble industry. The key positions of CEO, directors of production, marketing and sales, logistics and community service will be filled respectively by Mondhar Salma, Mahmoud Miladi, Maher Trifi and Salima Sta. The principals have 60 years of cumulative experience in the marble industry.

#### **7.16.4 Market study**

The decision by CMC to focus initially on the Spanish marble market and later to expand to other markets, including Tunisia, was based on the following analysis of the world marble market.

**The Spanish Marble Market.** The dynamic Spanish marble market ranked first in world block export (26%) and third in manufactured products (7%). CMC would be the first Tunisian exporter to the Spanish market. The main actors in the Spanish market are 492 quarries that specialize in marble (vs. other stones), several manufacturers and trading companies. The National Spanish Stone Federation (FDP), a private organization, includes seventeen professional associations with over one thousand companies specializing in extraction, production, and trade.

The Spanish marble market is divided between marble blocks and manufactured products. Each of these sectors consists of three activities: production, import and export. In 2004 the total production and import of marble blocks was over six million tons. This represented an annual growth rate of 4.5%. The average annual growth rate for the previous four years was 2.2%. One of CMC's initial target markets is the Spanish block import market which represented 345,000 tons of marble blocks in 2004 with an average growth rate over four years of 4.4%.

In 2004 the Spanish market of marble manufactured products, including production and import, was about 70 million square meters. The average growth rate for the last four years was approximately 10% representing an additional 7 million square meters in 2005. A second CMC target market is the Spanish manufactured products import market which was 150,000 square meters in 2004 representing an increase of 5.7%.

The main destinations (exports) of Spanish marble blocks are China 33% and the United States 25%, followed by United Emirates 9%, Saudi Arabia 7%, and South

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Korea and Italy 6% each. Marble block imports to Spain come mainly from three countries: Italy 41%, Turkey 38%, and Portugal 11%. Export of Spanish marble manufactured products go primarily to the United States, followed by equal quantities to Italy, France, Portugal, Mexico, and the United Kingdom. Production of blocks and manufactured products in Spain occur predominantly in two regions: Valencia and Almeria.

**Tunisian Marble Market.** In 2004, 84 Tunisian industrial companies were active in the marble sector. During the period 2000-2004, the national market jumped from 3 to 4 million square meters. In 2004 national exports reached 40,000 tons as blocks and the equivalent of 8,000 tons as manufactured products in square meters. Fifty-six percent of total national exports were shipped to the Italian market. National manufactured marble production increased 94% in quantity and 59% in value between 1995 and 2004, with compound annual growth rates of 12% and 7.4% respectively.

Quantities of imported marble were relatively stable between 2000 and 2004. In the same period, exports more than doubled to reach 48,000 tons in 2004. The Spanish marble market was chosen by CMC based on the high volume of exported block and manufactured products and the significant growth in imported marble blocks. Also, Spain has dwindling reserves of the cream-color marble which is plentiful in Tunisia. In addition, Tunisia's geographic proximity to Spain and the ease of transportation between the two countries make the Spanish market a logical choice.

### 7.16.5 Strategic marketing plan

The strategic marketing plan for the Carthago Marble Company is based on the following analysis.

*Strengths.* Tunisian marble is a unique and specific product with distinct color and physical characteristics. The supply of such marble is readily available and there is a significant reserve. CMC will have access to a pool of relatively young and skilled employees. The company intends to leverage these strengths by focusing exclusively on the extraction of marble blocks and the manufacture of marble products.

*Weaknesses.* The founders recognized several challenges related to starting a company from scratch. These included a lack of a strong brand image, limited distribution facilities, relatively low product value added and limited financial resources.

*Opportunities.* The cream-color marble reserves in Spain are drying up and the Tunisian cream-color marble is well accepted in many markets. Utilizing the most recent technologies available, there will also be future opportunities in the European and U.S. markets.

*Threats.* While marble has many unique qualities including longevity and beauty, there are many substitutes that are priced much lower. Worldwide energy prices

also place a burden on production and distribution costs beyond the control of the company.

### **7.16.6 Competitive strategy**

The strategic business plan for CMC is based on the above analysis and on the work experience of the founders. CMC hopes to establish a competitive advantage based on the small range of products, high quality and unique marble color. CMC intends to provide high-quality service, leveraging their years of personal experience in the marble industry. Further, they intend to price their products competitively. Sustainability of their competitive advantage will be achieved through a flexible, responsive organization, high levels of marble technology and management of customer/supplier relations.

### **7.16.7 Marketing strategy**

*Segmentation.* The primary target market will be marble factories and dealers including approximately one thousand Spanish companies and various industrial companies and contractors in Tunisia who use imported marble.

For marble blocks, CMC will focus on the two regions in Spain, Almeria and Valencia, which produce about 75% of the total Spanish productions. CMC will offer marble that reflects the warm and exotic cream color associated with the history of Carthage and North Africa to customers that appreciate high quality.

*Pricing and Sales.* In 2004, the average prices of manufactured products and blocks from potential competitors of CMC in the Spanish market suggest that China and Egypt are the main competition.

CMC prices will approximate the prices offered by China and Egypt, but they expect to have a competitive advantage based on proximity to the Spanish market. Pricing in the local (Tunisian) market will be competitive with the average price of local operators.

The sale of Tunisian marble through Spanish dealers will necessitate a close working relationship that will support their efforts through samples and promotional materials.

*Distribution.* Partnership relationships will be established with shipping companies carrying goods between ports on the Mediterranean, specifically Almeria (east coast), Valencia (south coast) and Tunisia.

*Production and Sales Objectives.* CMC expects to reach full production capacity after the third year of operation. For production and sales objectives, CMC considered three scenarios:

1. First Scenario: Production and sales for export to the Spanish market. Sell 15,000 blocks per year (30% growth rate) to dealers and industrial companies. Sell 50,000 square meters of manufactured products (10% growth rate) to dealers.
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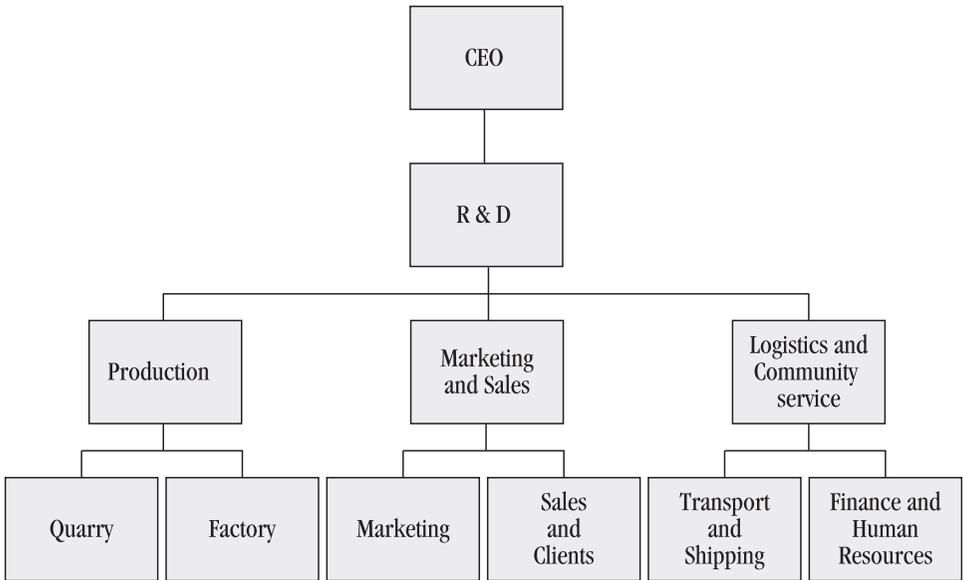
2. Second Scenario: Production and sales for export to the Spanish market and sales to local (Tunisian) market starting from the fourth year. Sell 15,000 blocks per year for export to Spanish dealers and industrial companies and 3000 blocks to domestic Tunisian industrial companies.
3. Third Scenario: Drop of sales to break-even point. Sell 7,500 blocks and 32,696 square meters per year to dealers and industrial companies, both foreign and domestic.

CMC projects sales to the Spanish block market of 15,000 tons in the third year of operation and 3,000 tons to the local (Tunisian) market in the fifth year. The expected penetration rate in the Spanish block market is 4%. CMC plans to sell about 50,000 square meters to the Spanish market in the third year and 10,000 square meters to the local (Tunisian) market in the fifth year. The expected penetration rate in the Spanish manufactured products market is 33%.

### 7.16.8 Operational plan

CMC's business system and organization is based on the following three organizational activities. The *production* process begins in the quarry. Three steps are needed to produce marble blocks: (1) cleaning the chosen area for extraction, (2) extraction and cutting of regular blocks, and (3) storage of blocks in the selling area. Four steps are required to produce finished (manufactured) products: (1) cutting blocks into slabs, (2) cutting slabs into tiles, (3) burnishing tiles and plinth, and (4) packaging and storage. *Marketing and sales* will implement the marketing strategy previously described and will continuously review and modify the plan as competitive conditions develop. *Logistics and community services* will focus on the transportation of blocks and manufactured products from the production site to the various clients. This will include negotiating agreements with land transporters and shipping companies. Developing and analyzing financial statements and managing human resources will also fall under this activity.

The CMC organizational chart is shown in Figure 8.

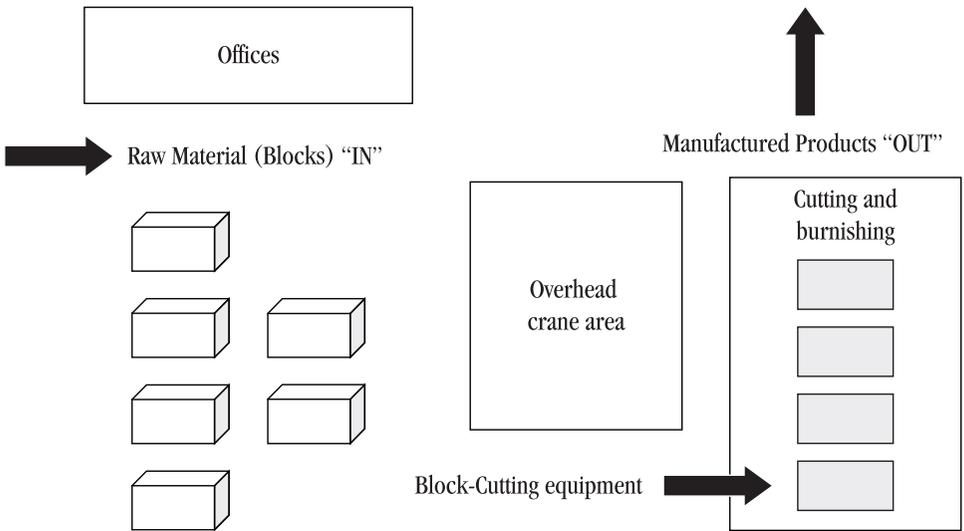
**Figure 8. CMC organizational chart**

The following are some implementation issues:

*Human resources.* CMC activities will require people with twenty-one different competencies, consisting of a managing staff that includes a chief executive officer (CEO), production chief, marketing chief and logistics chief. The executive staff will consist of a mining engineer, an industrial productions engineer and a marketing and sales executive. Quarry and factory forces will include four truck drivers, five skilled and five unskilled marble workers.

*The Quarry.* CMC will initially rent about 10 hectares of land in the northern part of the country. A five-year renewable license will be obtained. It will be necessary to obtain a special concession from the government due to the geographic location of the land in the mountains. It is estimated that raw material reserves will support up to one-hundred years of extraction activities.

*The Factory.* A covered factory building of 1000 square meters will be necessary to support production activities. The specific layout (shown in Figure 9) will be rationally designed to maximize production efficiency.

**Figure 9. CMC factory layout****Table 10. Required equipment for CMC's production process**

Number	Quarry	Number	Factory
1	Excavator	1	Block-cutting equipment
1	Loader	2	Cutting equipment
2	Dumpers	2	Burnishing equipment
1	Company car	1	Overhead crane
		1	Lift truck
		1	Company car

In addition, the office and administrative staff will need ten personal computers with specialized software to include local network exchange and connection to the Internet.

### 7.16.9 Financial plan

*Equity.* CMC intends to raise 460,000 Tunisian dinars by selling individual shares valued at 20 dinars<sup>26</sup>. There are two possible scenarios for selling the 23,000 shares. The first scenario involves negotiating with interested venture capitalists, who will over time decrease their share of ownership.

The second scenario will attempt to attract private shareholders (friends, family, local entrepreneurs and others), who will be permitted to own up to 49% while the founders own 51%. A possible third scenario would involve some combination of the first two with the founders ultimately maintaining the controlling interest in the company.

*Debt.* Additional sources of capital will be sought by incurring short- and long-term debt. A loan of 1,097,600 dinars will be negotiated with banks and other financial institutions. Utilizing the business plan and establishing available guarantees, the founders will attempt to obtain the lowest interest rates on the loans.

**Table 11. Uses of capital raised from debt**

Credit	Institution	Value in TNDs	%	Application
Short-term credit	Commercial bank	120,000	11%	Working capital
Long-term credit	Equipment suppliers/ Commercial banks	747,600	68%	Quarry equipment
	Spanish financial tools	230,000	21%	Factory equipment

**Table 12. Summary of CMC's financial plan (TNDs)**

Equity				Liabilities		
First Scenario		Second Scenario		Short-term debt	Long-term debt	
Founders	Venture capital company	Founders	Private shareholders	Commercial bank	Equipment suppliers	Spanish financial tools
80%	20%	51%	49%	11%	68%	21%
386,000	92,000	234,600	225,400	120,000	747,600	230,000
<b>460,000</b>		<b>460,000</b>		<b>1,097,600</b>		

Following the first scenario – production and sales for export to the Spanish market – the projected income statement for the first five years, including cash flow, is shown on the following page.

**Table 13. CMC's projected income statement in Tunisian dinars**

	1st year	2nd year	3rd year	4th year	5th year
<b>Sales</b>	2,150,000	2,595,000	3,280,000	3,280,000	3,600,000
<b>Cost of sales</b>	1,228,000	1,319,200	1,435,200	1,703,000	1,827,500
<b>Gross margin</b>	922,000	1,275,800	1,844,800	1,577,000	1,772,500
<b>Depreciation</b>	234,933	234,933	234,934	201,600	201,600
<b>Earnings before taxes</b>	687,067	1,040,867	1,609,866	1,375,400	1,570,900
<b>Taxes</b>	0	0	0	0	0
<b>Net income</b>	687,067	1,040,867	1,609,866	1,375,400	1,570,900
<b>Profit margin</b>	32%	40%	49%	42%	44%
<b>Cash flow</b>	922,000	1,275,800	1,844,800	1,577,000	1,772,500

### 7.16.10 Overall evaluation

Since the marble industry is mature technologically and subject to strong international competition, we will assume that the market value of the company in the fifth year is equal to sales of 3,600,000 Tunisian dinars. The internal rate of return  $i$  of the initial equity investment, 460,000 dinars, can be calculated according to the formula:

$$(1+i)^5 = \frac{\text{value in year five}}{\text{initial equity}} = \frac{3,600,000}{460,000} = 7.8$$

The internal rate of return is 51% a year, which compares favorably with the return sought by venture capitalists, 40% a year, for an investment of average risk. In the present case the overall risk can be expressed by the formula:

$$\text{Overall Risk} = \text{Technical Risk} \times \text{Market Risk} \times \text{Financial Risk}$$

In this business plan, there are three risk components:

1. *Technical risk* is low because the technology is mature, the machinery in Tunisia is below world standards, but modern equipment is available, and labor is plentiful and experienced in marble production.
2. *Market risk* is medium because the competition is worldwide and led by the major producing countries, and the market is stable and growing. Tunisia has the advantage of lower costs, geographic proximity and close commercial relations with Spain.

3. Financial risk is low because of the relatively modest investment required. Tunisia has ready financing available from private sources and banks at reasonable terms. Also, cash flow is expected to be positive at the end of the first year, and this will make financing for growth easier.

The venture potential (VP) can also be evaluated according to the formula of Section 2.1:

$$VP = E \times O \times R$$

where E represents the entrepreneurs, O the opportunity and R the resources.

*Entrepreneurs.* The four founders together have 60 years of experience in the marble industry, and they have MBAs and experience in marketing, sales, production and finance. They are also well connected with leading Tunisian social, financial and government networks.

*Opportunity.* The opportunity exists in Spain and the timing is now, due to declining marble natural resources in that country. On the other hand, Tunisia still enjoys considerable resources and is located close to Spain, with relatively low transportation costs.

*Resources.* The equity amount sought is relatively low (21% of first-year projected sales), and debt (51% of projected first-year sales) should be readily obtained at a reasonable rate from lending financial institutions. In addition, the Tunisian government, through API, will offer incentives for promoting marble exports and no income taxes will be due during the first five years.

Therefore, it appears that the business plan of the Carthago Marble Company is a feasible and sustainable business, and that this new entrepreneurial venture will contribute to the global competitiveness of Tunisia.

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# CHAPTER 8: START-UP OF INNOVATIVE ENTREPRISES

## 8.1 Challenges and risks of new innovative businesses

The challenges of starting a new innovative business are basically the same as the challenges of starting a small business: incorporation, obtaining financing, locating premises, hiring employees, developing the product or service, finding the first customers, launching the products, etc. However, there are additional challenges that are specific to innovative new ventures, which correspond to higher risks but also to higher payoffs if the company is successful. The overall risk depends on three components.

1. *Technological risk.* An innovative company is often based on a technological innovation that by definition is new and unproven. Thus, while the entrepreneurs are facing all the usual business challenges listed above, they must also develop, validate and incorporate the new technology into new or improved products and services. This will require additional time and funds. When CEOs are also the inventors, they may be tempted to dedicate major effort to technology development rather than building the company as an integrated team and organization, with a clear vision and strategy. This would be a mistake because the development of the business, market and technology should proceed in parallel.
  2. *Market risk.* For many technological ventures based on advanced technologies, the market is undefined, unclear and remote in time. For instance, twelve years elapsed between the Nobel Prize–winning discovery of the laser and its first commercial application (precision machining). Here again, the entrepreneurs, while facing all the new-business challenges, must define the possible applications and research the corresponding markets. Since the company's resources are limited, the market segments must be prioritized according to readiness to serve and payoff. Some new ventures are directed by technologists who are tempted to develop the technology first and then analyze the market. This is a mistake because the market analysis may give valuable inputs to the technology development. One possible solution to this challenge is the early identification of one or more “lead users” or “early adopters” and collaboration with them in developing and testing the first product or services.
  3. *Financial risk.* Obviously, higher technological and market risks imply higher financial risks because the amount, time delay and probability of the payoff is uncertain. There is, however, an additional financial risk. First, most financing sources, including venture capitalists, prefer to finance companies with at least partially developed technologies and markets. (There are a few zero-stage venture capitalists in the United States and Europe, but none in developing countries.) Second, some modern technologies (for instance biotechnology) are very expensive and lengthy to develop and the entrepreneurs may run out of cash sooner than expected, and at that point can
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only obtain additional financing at unfavorable terms, sometimes losing control of their companies. Also, as discussed in Chapter 2, entrepreneurial innovative companies should grow as fast as possible to achieve critical mass (\$2 million revenue and 10-20 employees) and to improve the probability of survival. Naturally, fast growth implies increasing negative cash flow and more difficult start-up financing. In addition, payments for goods and services implied may be unduly delayed, increasing negative cash flow. The Moroccan high-tech payment system (HPS) assists entrepreneurs and is considered a leader in financial payment systems.

There are no easy solutions for reducing the risk and improving the financing conditions of innovative entrepreneurial companies beyond the general principles discussed in Chapter 2. We will only reiterate here the importance of a competent, fully committed, well-integrated entrepreneurial team and of a professionally prepared complete and realistic business plan. These two core elements of the company are of equal importance in industrialized and industrializing countries, including the Maghreb.

Due to the lack or scarcity of formal financing sources for entrepreneurs, networking is very important in the Maghreb, where entrepreneurs are often prejudged on the basis of family background, social status, business and political contacts. Even in the United States, to obtain venture capital from the 700+ available sources, it is not recommended to make “cold calls.” Rather, an introduction should be obtained from a friend, or friend of a friend who knows one or more principals of the firm. Another possible source of introductions is clubs of entrepreneurs, incubators and technology parks, and similar organizations, as discussed in section 1.4.

Networking in the Maghreb could compensate, at least in part, the lack or scarcity of formal financing sources for entrepreneurs. More effort should be applied to create more synergy between the various venture investors and the entrepreneurial community, especially high-value-added entrepreneurs, in order to increase the availability of funding sources. This networking would be a key component in building the ecosystem and infrastructure in which genuine entrepreneurship will grow beyond the development of capital sources (see also Section 1.4 and Table 4).

## **8.2 Developing and launching new products and services**

New entrepreneurial companies are based on the recognition of an opportunity, that is, a new product or service which will satisfy an existing or potential market need (Chapter 3). The new product or service and the targeted market are described in the business plan (Chapter 7). After the initial financing has been obtained (Chapter 4), work will start on product (which might also be a service or system) development. If the results are successful, that is, the product meets the specifications, it should be tested before the market launch.

In this section we review very briefly some principles of product development, test and launch, with reference to industrializing countries, including the Maghreb.

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## 8.2.1 The new product development process

Successful mature companies have policies and formal organizations for new product development (NPD). The NPD team is cross-functional with representatives from design, engineering, manufacturing, marketing, finance and legal. The team is fully responsible for all NPD phases, from design to manufacture to product launch. The phases are separated by “gates,” which are opened after formal reviews by executive management.

In an entrepreneurial venture, the process is much more informal and fluid, the phases may overlap, and the reviews are less frequent. Nonetheless, the following general principles are valid, but need to be adapted to the specific situation of the country.

1. All functions should be represented in the NPD team throughout the entire development process. The reason is that the product must be designed not only to fulfill the functional specifications, but also for the entire life cycle, including maintenance, recycling, and meeting government safety and environmental standards. Many of these skills may be available among the venture founders. Others, for instance industrial design and compliance with government regulations, can be obtained from networking or by procurement from specialized companies on an as-needed basis.
  2. It is important that all “downstream” requirements be included in the early design phase, to avoid costly surprises and delays for last-minute “fixes.”
  3. No matter how small the venture, a NPD leader should be appointed who is responsible for maintaining all documentation (which may be useful later for IP protection or litigation) and recording progress in meeting project milestones, in addition to time and expenses.
  4. During the NPD process, deviations from the original project plan will inevitably arise that should be addressed as soon as they appear. It is useful to visualize the project plan as a three-legged stool. The three legs are: specifications, time and expense. If one leg breaks, the stool falls down. If a problem appears in one leg, it may be fixed by working on the other legs. For instance, problems in meeting the specifications may require relaxing them, allowing time delays, increasing expenses above the budget, or a combination of these.
  5. At times, the NPD team becomes overoptimistic and overconfident, or is afraid to communicate the bad news to top management, hoping that a miracle will happen. In this case, a project review is necessary to realistically assess the situation and determine remedial actions. For objectivity, the review should be conducted by the CEO and, if necessary, by a trusted and experienced friend of the company, or a competent consultant.
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### 8.2.2 New product testing

Whether the product is simple (a marble tile) or sophisticated (software for bankers), it should not be launched into the market without first testing how customers respond.

There are three stages of product use testing: alpha, beta and gamma (that last one mostly for software).

1. The alpha test is conducted with subjects who use the product and report their results and impressions. Alpha tests should be conducted with people who are friendly and trustworthy and will not communicate the results to outsiders, especially if the results reflect badly on the company. Possible sources of test subjects are employees of the company or friends who are interested in the novel technical and functional characteristics of the products. During the “browser wars” Microsoft used its best employees for testing, while the smaller Netscape used thousands of software enthusiasts found through the Internet.
2. Beta tests are field tests of products. During a beta test, the entrepreneurs witness how customers use the product in practice and obtain valuable information, including some original ideas, on how to install the product, instruct the users, service the product and obtain additional revenue. Customers selected for beta tests should be friendly but objective and not afraid to communicate shortcomings and bad impressions.
3. Gamma tests are mostly used in the software industry because the products operate in many different environments and are almost never “bug free.” Finding the bugs and supporting the customers who detected them are the objectives of gamma testing.

In the Maghreb, if the products are intended for local use, there will be little difficulty doing beta testing by utilizing established networks. If the products are mainly intended for export, it will be necessary to identify reliable partners and customers, as discussed in Section 8.3 below.

### 8.2.3 New product launch

A well planned and implemented product launch is essential to market success and is one of the most exciting events in the history of an entrepreneurial company. It is also a reality test of the value of the concepts and hard work of the entrepreneurial team.

While launch is the last phase in the NPD process, launch planning should start much earlier and be incorporated in the NPD activities and management reviews. A successful launch requires both creative thinking and administrative tasks. Therefore, it is important to name a *launch leader*, who usually is a member of the NPD team. The launch team should include persons with skills in marketing and customer relations, supply chain management, distribution and channel planning, and training for sales and service. If some of these skills are not available in the company, experts can be hired on an as-needed basis. If the launch is to be successful, it is very important for

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the company to have enough inventory to satisfy the market's growing demand. Many products have failed because the company was unable to deliver on time to the customers, especially for seasonal items like toys before the holidays. When prospective buyers are disappointed, in some cases they often turn to competitors. Therefore demand and supply must be well synchronized in the product launch plan.

The product launch plan normally includes the following steps.

1. *Rollout Strategy.* In a *hard launch* the product is introduced at the same time in all targeted markets, for instance the three Maghreb countries. The risk is that, since market response is difficult to predict, there may be too much inventory with high carrying costs, or too little with loss of sales or customer goodwill. In a *soft launch* the product is introduced sequentially in different markets. This gives time to adjust production to demand, provide instructions in different languages, and meet different government regulations. The danger is that, with today's Internet communication, some countries may be disappointed, or worse, competitors will move to block access to the as yet unserved markets.
2. *Finding the right channel partners.* In many cases, the entrepreneurial start-up may not be able to sell products directly to the end-users and must go through *channel partners* to identify, contact, sell to and service potential customers. The most appropriate partners must be recruited well before the launch and given incentives to move the new product. If the product is not simple, sales and service personnel must be trained before launch. This could take place during the beta-testing phase.
3. *Setting the price.* Pricing an innovative product that is new to the world is difficult because there are no benchmarks for comparison, for instance with similar products offered by competitors. The first step is to set a price range, the second to set the price within the range. The lowest limit of the range is the cost of developing, manufacturing and selling the product with no or minimal profit. The highest limit is the value of the product to the potential customer, allowing for the perceived risk of switching to a new supplier, as in the following example.

A new venture, not yet established and unknown in the market place, has developed a new product that, in beta testing, has been proven to be twice as efficient as the functionally equivalent product sold by a well-known company such as IBM. If the new product is offered at 190% of the IBM price, very few will buy it because they are afraid of the risk inherent in leaving IBM for an unknown supplier. Therefore, the price must be lowered, to give an incentive to the customer for taking this risk. Based on studies of the economics of innovation, a good starting point is at 150%, where the benefits of the new product are equally shared by the customer and the supplier. Depending on the situation, it may be wiser to start higher, say at 167%, and lower the price if the market does not respond. Remember, it is much easier to lower the price than to raise it!

For some long-lasting, repeated-use products, the profits should be calculated for the entire life cycle, including downstream supplies, replacement parts and services.

In the razor and blades example, it is advisable to price the razor at cost, because most of the profit will come from the blades. This is also true for products that have frequent upgrades, like medical diagnostic systems, or regularly scheduled inspections and maintenance, like aircraft engines. However, it is not advisable to sell products below cost for export because this may trigger anti-dumping reactions.

For some sophisticated products, price carries an important message concerning the value perceived by the customer. For instance, Finnish designers are among the most admired in the world. A simple mobile teacart designed by Alvar Aalto may cost less than \$300 to manufacture, but it sells for \$3000 or more to wealthy connoisseurs. Thus, the high price carries a subtle message: this is top-quality furniture. If the same teacart were priced lower, say \$800, the message would be: this is of medium quality. Few sophisticated potential customers would buy it, and the general public would probably not buy many either because they are uninterested in specialized furniture like teacarts.

### 8.3 Internationalization and globalization

The market in the Maghreb for innovative products and services is relatively small. Therefore, new entrepreneurial ventures will have to internationalize and globalize in order to continue to grow and contribute to regional economic development through exports. One example of a company that has done this is Nokia of Finland, a country of only 5.2 million inhabitants (compared to 75 million in the Maghreb), which is now the world leader in the mobile phone industry. From the start (1993) Nokia targeted not just the Finnish or European market, but the entire world, with an emphasis on Asia.

The first stage is *internationalization* by selling products or services outside the country of origin, for instance a Tunisian company selling communication circuits to a Swedish multinational. In parallel, some components of the hardware may have to be sourced abroad, for instance from Taiwan, because they are unavailable or too expensive domestically. The sale of products and the procurement of parts could take place by direct negotiations between the two parties or, more frequently, through distributors, agents or wholesalers, who of course will take a substantial commission for their services.

The second stage may be *outsourcing*, where the Tunisian company builds clones for a foreign company, or when the Taiwanese company builds components specified by the Tunisian company. The third stage could be the building of a *stable relationship with a preferred supplier or distributor*. This may require revealing proprietary design or marketing information which, if not properly protected (Chapter 5), could allow the supplier or vendor to become a competitor. In the fourth stage, the company in the Maghreb finds and establishes *formal stable relationships with a partner* in a foreign country of interest (for instance, France) and invests personnel, time and effort, and funding for a joint venture.

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The last stage is *globalization*, where the entrepreneurial company visualizes strategically the entire world as one market and as one source of production and capabilities. In the case of the Maghreb, there may be a surplus of certain capabilities (for instance, software and IT engineers) and manufacturing skills (for instance, electronics assembly and testing) and some multinationals, mostly from Europe, may want to take advantage of the available workers, whose costs are lower, as part of their globalization strategy. Normally, developed countries globalize their businesses by entering into industrializing countries according to the following steps.

1. Finding skilled hands to do specialized routine work, such as answering in India or the Philippines phone calls made by U.S. customers.
2. Finding human resources that can extend and complement technical work, such as GE in India and China.
3. Increasing access to special competencies, such as software development and testing in Eastern Europe.

This process of globalization entails risks for the industrialized countries, which can become opportunities for the industrializing countries. The more extensively and deeply the developed countries globalize through outsourcing, the more technical and management capabilities they must transfer to the receiving countries. In some of these countries, IP protection is enforced poorly or not at all, and some unscrupulous companies may be able to copy the design and the technology with a few adaptations. In other cases, the transferred skills cannot be protected legally, and open and tacit knowledge will be transferred through personal interaction, for instance Algerians who are trained in Europe for oil drilling, or Swedes who are training Tunisian workers to build electronic components for mobile phones.

The example of Taiwan is a real lesson in economic development through transfer of technology and skills. At the end of the Second World War, Taiwan was, after decades of Japanese occupation, a very poor undeveloped country. In 2006, according to the World Forum, Taiwan was considered an industrialized nation, number 4 among 132 countries in higher education and training, number 9 in innovation, well ahead of many European countries and the Maghreb (Section 1.2). Taiwan is now the world leader in silicon foundries, and a major exporter of electronic components, computers, mobile phones, etc. Taiwan achieved its present status by following, during the last 50 years, the five stages of technological and economic development described in Table 14. This table shows the evolution of the business strategy of leading Taiwanese companies, and how they gradually improved their technological and market positions. Of particular interest is the parallel evolution of the economic and technical development policies of the Taiwanese government. The last column shows the policies and strategies for the entrepreneurial development of leading Taiwanese companies, most of which started as family companies and continued as such through three generations. While

Taiwan and the Maghreb are more than 10,000 km apart, today's world is becoming "flatter" due to the Internet and globalization. Therefore, it appears quite possible that the Maghreb countries, starting with Tunisia, could follow the process of economic development described above by adapting their government and business policies and strategies to their cultural, social and political environment.

**Table 14. Stages in the development of Taiwan's entrepreneurial industry**

Stage	Time	Strategy	Technological Position	Market Position	Government Policy	Entrepreneurial Policy
1	1950s	Manufacturing subcontractor	Basic assembly skills Manufacture to customer specs Mature technology	Cheap labor Passive importer Distribution by buyers	Tax incentives Keep wages low Import substitution	Small family shops Minimize costs and resources Obtain buyers' confidence
2	1960s – 1970s	OEM (original equipment manufacturer)	Reverse engineering Process improvements Quality and cost control	Active sales to foreign companies Production to sophisticated specs Sell both low cost and quality	Manufacturing investments by multinational companies Acquire foreign technology Scientific research	Upgrade shops to comply fully with specs Learn from major customers
3	1980s	ODM (own design manufacturing)	Product design Process innovation Advanced production skills	Market own design and advanced production International marketing to multinational companies	Technology development and application Bring researchers back home Hsin-Chu Science Park	Integrate design, manufacturing and marketing Learn from multinationals and be a fast follower
4	1990s	OBM (own brand manufacturing)	In-house applied R&D Product innovation Innovative imitation	Market own products to the world Promote and sell own brand	Create a community of research universities, national labs, high-tech companies	Full fledged business competing in international markets
5	2000s	Multinational company with strong base in Taiwan	Frontier R&D linked to market need Advanced innovation Joint ventures with foreign multinational companies	Worldwide brand recognition In-house market research Independent distribution	Scientific and technical papers Diversification in new technical arenas Close relationships with foreign universities and labs	Expansion of R&D, production and marketing world-wide, but maintain and adapt family entrepreneurial culture

Source: Ding and Aberti (2002)

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# CHAPTER 9: HARVEST AND EXIT STRATEGIES FOR ENTREPRENEURIAL FIRMS

## 9.1 Introduction

This chapter will focus on strategies for harvesting entrepreneurial success and exiting entrepreneurial firms when they have reached the mature stage. When the entrepreneur proposes the initial business plan, an exit strategy reflecting the desire of investors and founders for liquidity should be scheduled. Thus, the ultimate goal of exiting an entrepreneurial company is to yield liquidity. Entrepreneurs might also find themselves constrained to sell their company before maturity for a variety of reasons, for instance if they suffer from health problems.

At the pre-investment stage, an entrepreneur should use personal wealth to cover the costs required to develop the business plan, for instance making a product prototype. After spending a large amount of personal resources, however, entrepreneurs are vulnerable to a high rate of delinquency. When personal sources of funding are exhausted, the entrepreneur needs to secure external financing channels in order to ensure the survival, as well as the growth, of the venture. At the post-investment stage, an entrepreneur's liquidity position is closely tied to the outcome of the venture. When the company gets to the mature stage, it is time for the entrepreneur to harvest the company's success and orchestrate an exit strategy. In this chapter, we present first the most advantageous strategies prevalent in the North American market, the various types of exit vehicles, discuss the merits and demerits of each type and highlight the factors that determine which strategy to choose. Second, we discuss exit strategies in the Maghreb. Once the appropriate exit strategy has been chosen, the entrepreneur needs to prepare every step along the way.

## 9.2 Liquidation of assets

A common way for an entrepreneur to quit the company and achieve liquidity is to shut down the business and sell the assets to whoever has an interest in their value. Why would entrepreneurs want to liquidate their business? There are several reasons. When an entrepreneurial company reaches its mature stage, it generates a great amount of cash in excess of the need for reinvestment and sustainable growth. This free cash flow can be distributed to shareholders by paying out dividends or by repurchasing stock. Or at this point, the business can be sold advantageously. It is also possible that the industry might be experiencing a decline and the business is no longer growing. Yet another scenario is that the entrepreneur may be ready to retire, and there is no second generation in the family that is interested in continuing the business.

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There is no transfer of control during liquidation, and the entrepreneurs and other owners maintain control throughout the harvest period. The entrepreneur can gradually liquidate the company's assets and withdraw money over a number of years, but there are some disadvantages associated with this exit strategy. Normally, the proceeds from the sale of assets must be used to repay creditors first and then be divided among the shareholders. The treatment and taxation of liquidation proceeds has some negative implication. For example, the liquidation proceeds are treated as ordinary income rather than capital gains. Moreover, if the company is organized as a corporation, the dividends will be double taxed at both the corporate level and individual level.

This method of exit generates the smallest amount of money because the entrepreneur gets at most the market value of the company's assets. Though much of the effort to find a buyer for the entire venture can be avoided, some negotiation is required to get a fair price for the current assets. More importantly, a firm is most valuable when it is valued as a going concern. In the case of liquidation, other things like business relationships, customers and suppliers and personal reputation will be discounted, and there may never be an opportunity to recover their value.

It is noteworthy that the decision to liquidate assets can be the consequence of a bankruptcy filing. It is widely recognized that new ventures are subject to the "liability of newness and smallness," and hence they are associated with high uncertainty as well as high failure rates. When these small ventures experience financial distress, entrepreneurs may resort to the bankruptcy law to exit their companies.

### **9.3 Mergers and acquisitions**

Sometimes investors and initial founders will exit via an acquisition strategy in which the entire firm is purchased by a third party as a going concern. In the majority of cases, the outside buyer will be a strategic acquirer. A strategic acquirer is a business entity that may be a competitor, a supplier or a customer of the target venture and that is typically much larger than the target firm. A competitor can take the strategic move to consolidate the industry position by acquiring the targeted firm, while a supplier or customer can use the business and its assets to strengthen their own line of products and services. Following the acquisition, the acquirer may leave the target company as a wholly owned subsidiary or as a separate division, to preserve the management/entrepreneurial team responsible for the firm's past success. Alternatively, it may integrate the firm's technology and innovation with its own. In either case, a major motivation for the transaction will often be to meld the target's products and technology with its own, in order to produce synergistic gains.

From the mid-1990s on, start-up entrepreneurs used IPOs as the preferred route to liquidity. However, after the Internet bubble burst in 2000 and the stock market

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crashed in 2008, the IPO market has significantly diminished in size. Since then, acquisitions have become an increasingly important avenue for providing liquidity and continuity for emerging companies. Many new ventures may not survive to the IPO stage after they burn out their cash hoardings, and they have a serious need for funding during that time period. Selling the venture to another company can recover the value of its assets and intellectual property, though the entrepreneur may not be in a good position to negotiate the price.

A private sale to a third party has very different consequences from those of an IPO, especially when the venture has received private equity investment. For the private equity investors and the VC partnership, a private sale is attractive, as it provides payment in cash or marketable securities and ends the partnership's involvement with the firm. For the company's management, in contrast, a private sale is potentially unwelcome, to the extent that the company is acquired by a larger company and cannot retain its independence. Ultimately, the form of exit selected by venture capitalists will depend on the portfolio company's future prospects. In some situations, selling the equity stake to another company may generate more proceeds than going public because the acquirer may place a higher evaluation on the target than the public capital market due to the high level of uncertainty.

An entrepreneur can choose to exit a company through a merger. A merger is when two companies get together to expand their operation, and combine the two into one bigger company. In most mergers, stock swaps are used to allow the shareholders of two companies to share the risk in the deal. Therefore, in mergers, the entrepreneur may not actually receive cash for some time. However, the tax consequences of a merger are often less severe than for an acquisition.

## 9.4 Initial public offerings

An initial public offering (IPO) is an important event in the life of a company. Undertaking the IPO process moves a company from the private domain to the public domain. In going public, an issuing firm will typically sell 20-40% of its stock to the public. The issuer will hire investment bankers to assist in pricing the offering and marketing the stock to the public. The investment banker will also conduct a due diligence investigation of the firm, write the prospectus, file the necessary documents with the U.S. Securities and Exchange Commission (SEC)<sup>27</sup>, and assemble a syndicate of other investment banks that will help sell the deal. Each bank in the syndicate gets a certain number of shares in the IPO to sell to clients, and then gathers so-called conditional offers from clients to see what kind of initial demand there is for the deal.

The next step in the IPO process is multi-city tours, also known as the road show. The road show is believed to be an information-generating stage where institutional investors can have the chance to understand the management and business plan of the issuing company and present their interests in buying the stocks. Once the

road show ends and the final prospectus is printed and distributed to investors, company management meets with the investment bank to choose the final offering price and size. Once the offering price has been agreed upon, an IPO is declared effective. This is usually done after the market closes, with trading in the new stock starting the next day as the lead underwriter works to firm up its book of buy orders.

In the United States, firms issuing stocks use either a firm commitment or “best efforts” contract. If the underwriting is done as a firm commitment, the underwriter agrees to purchase and sell the entire amount of the security issue and assumes the financial risk for any unsold shares. One advantage of a firm commitment underwriting is that the underwriter commits that the issuer will receive a set amount of money at a set date after the completion of a successful IPO. One disadvantage is that the underwriter bears a large amount of risk and if the market sentiment turns negative, the underwriter may become reluctant to go through the issuance. If this happens, the underwriting may get delayed, postponed indefinitely or even withdrawn. A second disadvantage is that a firm commitment underwriting can be expensive.

In a “best efforts offering,” the investment bank pledges to provide its “best efforts” within a specified period of time to sell a number of shares between some pre-specified minimum and maximum quantity. If the minimum number of shares is not sold at the offer price within the specified time period, usually 90 days, the offer is withdrawn and all investors’ monies are refunded from an escrow account, with the issuing firm receiving no money. Best efforts offerings are used almost exclusively by smaller, more speculative, issuers. Essentially all IPOs raising more than \$10 million use firm commitment contracts.

A company management generally favors an IPO exit strategy because it preserves the firm’s independence and provides it with continued access to capital by creating a liquid market for the firm’s securities. Once the stock is publicly traded, this enhanced liquidity creates a better information flow from firm insiders to investors and allows the company to raise capital on more favorable terms in the future. Furthermore, existing shareholders can also sell their shares in the secondary market. Along with these benefits of becoming a public firm, there are certain ongoing costs associated with the need to supply information on a regular basis to investors and regulators for publicly traded companies.

Furthermore, there are substantial one-time costs associated with IPOs. Those include legal, auditing and underwriting fees, the time and effort management devotes to conducting the offering, and the dilution associated with selling shares at an offering price that is, on average, below the price prevailing in the market shortly after the IPO (also known as underpricing or money left on the table).

An IPO generally results in the highest valuation of a company and, thus, is often the preferred exit route by many young firms. For example, a venture economics

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study finds that a \$1 investment in a firm that goes public provides an average cash return on \$1.95 in excess of the initial investment, with an average holding period of 4.2 years. The next best alternative, an investment in an acquired firm, yields a cash return of only 40 cents over a 3.7-year mean holding period.

## 9.5 Outright sale

### 9.5.1 Family and relatives

When an entrepreneurial company is founded by more than one family member, it is always an option for the entrepreneur to exit by selling the equity stake to other family members. There are several advantages associated with this outcome. For example, because of the mutual acquaintance, there is less need for due diligence. Furthermore, it is more likely that the value system of the entrepreneur can be preserved and carried on in the future.

### 9.5.2 Management buy-in and buyout

Another way for the entrepreneur to achieve liquidity is to get bought out or bought in by someone who will take over the business. Buy-in and buyout refer to a transaction in which one part takes over all the rights of the other part. A typical buyer would be a team or individual who is in the same line of work and who will take over the business on the basis of buying the existing ownership from the entrepreneur. The difference between buy-in and buyout is that the buyer comes from outside the company in the case of a buy-in whereas the buyer works in the same company in the case of a buyout. In either case, the entrepreneur gains a liquidity position by selling an equity stake to the other party. The buyer can pay for the entrepreneur's ownership upfront, or use a technique called "leverage buyout or buy-in," whereby the buyer leverages the future cash of the business to pay off the debt financed by private equity, banks or high-risk bond issuance. In some circumstances, the seller can finance the buyer and then let the buyer pay off the loan over time.

### 9.5.3 Employees

The entrepreneur can also sell the business to a current employee or employees. The employee stock ownership plan (ESOP) is a good vehicle for the entrepreneur to exit the company. By selling shares to an ESOP, the entrepreneur can ensure a legacy and that the company will be intact by putting it in the hands of those who care about the company. There are several advantages associated with leaving the company through ESOP. First, the sale price reflects the fair market value and the sales proceeds are tax exempt. Second, the entrepreneur can sell stocks instead of the assets of the company. Third, the entrepreneur can fully or partially exit the company and have the flexibility to maintain control of the company at will. Similar to leveraged buyout or buy-in, exiting through ESOP can be intensively financed largely with debt financial capital.

## 9.6 Staying with the status quo or growing the business?

In many situations, entrepreneurs have no intention of exiting the entrepreneurial company and want to maintain the right to control it. They can grow the business or retain the status quo. However, in either case, the entrepreneur still has the incentive to obtain some liquidity by harvesting entrepreneurial success at least in part. One favorite way to achieve this objective is to simply get cash out of the company on a daily basis. For example, entrepreneurs can choose to pay themselves a huge salary with a big bonus. This is a way to increase the liquidity of the entrepreneur regardless of the actual performance of the company. In certain countries, the entrepreneur can also issue a special class of shares with a higher dividend payout ratio than other shareholders receive. Consumption of perks out of the company can be another way of rewarding the entrepreneur. Furthermore, the entrepreneur can simply live a quiet life by relying on the regular income of the company.

However, harvesting entrepreneurial success by pulling the money out of the company does not come without cost. If the entrepreneur already takes a high salary, an increased salary will incur a higher tax burden because salary is taxed as ordinary income. What's more, a large amount of cash outflow may be in conflict with the company's business strategy. While the entrepreneur can harvest success by draining money out of the business, he or she should also think carefully about future investment opportunities.

## 9.7 Exit strategies in the Maghreb

In Tunisia, the available exit strategies are:

- Management buy-out (MBO);
- Management buy-in (MBI);
- Acquisition by a big company;
- A merger with a public company;
- IPOs;
- A package combining many moves.

In the Maghreb, the most frequent exit strategy is the management buy-out, where the entrepreneurs buy the shares of the outside investors. The second is a trade sale or acquisition by larger companies (whether as an unlisted merger or as a merger with a listed firm). The IPO is the least frequent.

However, the most popular exit strategy (75%) is the "portage," which consists of selling the business back to the entrepreneur. This plan is different from the put

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option that can be found in Europe (21% of the strategies). Actually, portage is rather similar to a loan where conditions of when and how much are initially set. The portage exit, which is overused in Tunisia, reflects an immature financial market.

**Table 15. Comparison of exit strategies used in Tunisia and in Europe**

Exit strategy	Tunisia	Europe
Portage, or selling back to the entrepreneur	≥ 75%	21%
Acquisition by a company	≤ 15%	24%
Financial institution acquisition	≤ 0%	16%
Initial public offering	≤ 5%	15%
Leveraged buyout	≤ 5%	18%
Other	≤ 0%	6%

Source: TunisieValeurs (2006)

Indeed, this strategy is encouraged by Tunisian law. Article 21 of law number 88-92 of 2 August, 1988, refers to the investment companies with venture capital and stipulates that “participation could be for one’s account or for third parties with the aim of retrocession.” Article 22 specifies that “The participations of investment companies or venture capital have to be agreed by the entrepreneurs and fix the modalities and the periods of the realization of the retrocession plan.”

A comparison of exit strategies in Tunisia and Europe is shown in Table 15.

## 9.8 Summary

Harvesting and exiting the entrepreneurial company provide liquidity for the entrepreneur. More importantly, successful exits signal the capability of an entrepreneur and release the financial resources from the existing entrepreneurial company. Therefore, exits are critical to ensuring attractive returns for investors and raising additional capital to fund new entrepreneurial ventures. This chapter discusses the competing exit possibilities for entrepreneurs and other initial founders and investors and introduces the dynamics of the time-to-exit for the IPO, mergers and acquisitions and liquidation exits. With a deeper understanding of

different vehicles of exit, entrepreneurs will be better prepared to embrace opportunities and pursue their entrepreneurial vision.

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## CHAPTER 10: CONCLUSION

There is an Italian proverb “*Chi ben comincia è alla metà dell’ opera,*” which is equivalent to the English proverb “Well begun, half done.” The start-up phase of a business is difficult, particularly for new entrepreneurial companies whose founders have little business experience, and for innovative companies that face higher technological, market and financial risks. In the Maghreb, support systems for start-up companies are newer and weaker than in developed countries, but social and business networks are often stronger. However, the opportunities, first for the regional market of the Maghreb, then for the extension to all of North Africa and the Middle East, and finally to the entire world, are now more accessible and broader than in the earlier phases of industrial development. Entrepreneurs in the Maghreb have always demonstrated practical initiative, creativity and social responsibility, qualities which are the foundation of their culture and historical heritage, and they will continue to do so in the future.

In closing, we would like to emphasize that *originality coupled with thorough planning* will be key for the success of an innovative business that contributes significantly to national and regional development. We hope this book will assist entrepreneurs in the Maghreb and the countries where they operate to achieve the success which they deserve in the world market place and in the community of nations.

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# FOR FURTHER READING

The following are references to selected books and articles that may be useful to readers of this book.

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Additional sources of information

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Caisse Nationale des Retraites (Algérie): [www.cnr-dz.com](http://www.cnr-dz.com)

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## ENDNOTES

- <sup>1</sup> For example, coauthor Pier Abetti has taught entrepreneurship courses since 1986 in twenty plus countries on six continents.
  - <sup>2</sup> In the Arabic language, Maghreb means sunset, hence “the West.” The definition of the Maghreb varies. Tunisia, Algeria and Morocco comprise the “core Maghreb” while the Arab Maghreb Union also includes Libya and Mauritania. In this book Tunisia, Algeria and Morocco are referred to as “the Maghreb.”
  - <sup>3</sup> The economic crisis of 2009-10 has disrupted the development of some countries. Therefore the 2008 data are more representative of the status of world competitiveness.
  - <sup>4</sup> Typically, the total cost of a researcher in a new venture is half of the cost of a researcher in a large company.
  - <sup>5</sup> A typical example is the pharmaceutical industry, where the top companies subcontract work to innovative new ventures, to save money and time and stimulate creativity.
  - <sup>6</sup> For instance in the state of Texas in the United States, a new venture can be incorporated in one day at a minimal cost.
  - <sup>7</sup> In contrast, transfer of technology to Mexican subsidiaries of U.S. multinationals has been satisfactory.
  - <sup>8</sup> The relative contributions of incubator firms and established firms, such as Nokia, cannot be assessed.
  - <sup>9</sup> Recently, Tunisia and Algeria signed an agreement for scientific and technical cooperation with the United States in North Africa and the Middle East.
  - <sup>10</sup> <http://www.rmie.ma>
  - <sup>11</sup> <http://idisc.net/en/incubator.102.html>
  - <sup>12</sup> <http://www.unido.org/index.php?id=o26090>
  - <sup>13</sup> Internal venturing in established companies, also called “intrapreneurship,” is beyond the scope of this book.
  - <sup>14</sup> This phenomenon is particularly evident in the American biotech industry as an attractive alternative to IPOs.
  - <sup>15</sup> A typical example of a successful joint venture between partners of widely different cultures is the 30-year Corning-Samsung partnership.
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- <sup>16</sup> This case has been prepared with the valuable assistance of Rafik El Herguem, journalist and assistant professor at IHEC, Carthage.
- <sup>17</sup> Some firms go bankrupt, others are acquired, and a few are shut down by the owners.
- <sup>18</sup> For instance, RPI and The 7th November University at Carthage in Tunisia have signed an agreement for exchange of students, including summer work in incubators, technology parks and local entrepreneurial companies.
- <sup>19</sup> The Mediterranean Schools of Business in Tunis offers such courses, in conjunction with the University of Maryland.
- <sup>20</sup> 10th Social Economic Development Plan, 2002-2006
- <sup>21</sup> Entrepreneurs with innovative but risky projects can generally find venture capital in your country (1=not true to 7=true);  
*<http://www.insead.edu/v1/girt/wef/main/analysis/showdatable.cfm?vno=1.26>*
- <sup>22</sup> 10th Social Economic Development Plan, 2002-2006
- <sup>23</sup> According to the World Economic Forum, the level of sophistication of financial markets compared with international norms: Tunisia = 50, Morocco = 77, and Algeria = 123. Note that Casablanca, Morocco, is home to the second largest stock exchange in Africa after Johannesburg, South Africa.
- <sup>24</sup> This case is derived from the paper “The Playboy Emblem: A Case of Trademark Infringement” by D.F. Kuratko, presented at the Midwest Society for Case Research Workshop, 1986. Names of persons and companies are fictional.
- <sup>25</sup> This case study was written by Professor Robert Sands while he was a Fulbright Scholar in Tunis (2006-07), teaching at IHEC and the Mediterranean School of Business.
- <sup>26</sup> The Tunisian dinar was worth \$0.69 in March, 2009.
- <sup>27</sup> Similar regulatory bodies exist outside the USA.
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