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THE STRATEGIC IMPORTANCE OF QUALITY EDUCATION IN MENA COUNTRIES TOWARDS INNOVA- TION-DRIVEN ECONOMIES AND ENTREPRENEURIAL SOCIETIES

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Abstract: *Purpose:* Discuss the strategic importance of quality education as a determinant in the transformation process towards innovation-driven economies and entrepreneurial societies with reference to the case of Middle East and North African countries.

Design/methodology/approach: The author uses a descriptive and analytical method, and draws from available literature and secondary data. Inspiring from his long teaching experience, he presents a critical viewpoint about the situation with focus on innovation/entrepreneurship education in the Middle East and North Africa region.

Findings: In general, education systems in the region are less practice and business oriented than those in leading Developed and Emerging countries. More specifically, gaps in innovation and entrepreneurship are very significant with regard to teaching, training, learning methods, post-graduate and research programs.

Research limitations/implications: The study is broad covering the Middle East and North Africa countries, but conclusions apply to the great majority of them. Decision-makers in the education sectors are called to introduce the necessary changes as fast as possible in order to make teaching and learning an exciting and practically useful process to students themselves, the economy and society, at large.



International Journal of
Innovation and Knowledge
Management in Middle
East & North Africa
Vol. 1 No. 1, 2012

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Originality/value: Very little or not enough research is available to explain why the Middle East and North Africa countries are lagging behind in shifting towards innovation-driven economies and entrepreneurial societies. This question is quite interesting while huge investments have been made in education and infrastructure. These countries' science and technology policies are also known to be very ambitious.

Keywords: *Quality Education; Systems; Entrepreneurial Universities; Societies; Innovation-Driven Economies; Accreditation; Standards; Culture; MENA Countries.*

INTRODUCTION

Middle East and North African (MENA) countries are striving not only to close the various gaps with the developed world, or even the emerging economies, but to build solid and sustainable social, economic and technological bases appropriate to modern times and conditions. Their specific position within the Arab world is mainly due to their greater wealth and the number of young people, both educated and illiterate. For the time being, relatively large financial and natural resources are available, but against that unemployment and brain drain are high if not alarming, and social welfare is overall unsatisfactory.

Under internal and external pressures, MENA governments have been investing large amounts in education and modernization of infrastructures. They have also set up policies to face the challenges through liberalization of their economies and educational systems, enhancement of their private sector, and encouragement of small businesses creation. However, while all these measures are very important, something crucial is hindering the efforts and renders outcomes somehow superficial, or the desired impact limited to only some socio-economic categories of the populations. The largely prevailing idea, that liberalization, openness and

modernization will bring improvements and change, needs therefore more precision. For real improvements and change to occur, not only adequate financial resources are required, but also good policies and management, quality systems and inputs along with positive behaviors, attitudes, ways of thinking and performing.

Plausibly, one underpinning aspect much considered at formal policy levels in the region, but far less effectively monitored on the ground, is quality education with its theoretical and practical dimensions. These two dimensions are but complementary and essential in providing sound learning, strong capabilities of excelling at work, and practical possibilities to exploit innovation and create businesses. Hence, this paper is concerned with the underlining educational bottlenecks that slow down the overall process of shifting into innovative economies and entrepreneurial societies, in the MENA region. The relationship between quality education and such economies and societies is a strong one, and involves the use of know-why and know-how to shape and refine development objectives. Wherever there is a quality education system, you have scholars, academics, talents, leaders, inventors, innovators and entrepreneurs.

Broadly, Innovation-driven economies are defined here as those enhancing production and use of creative ideas, innovative projects and knowledge. Entrepreneurial societies are also defined as composed of well integrated systems and sub-systems allowing for public and private production and exploitation of ideas and knowledge, consequently leading to economic growth, technological and social developments. By quality education, it is meant here a system of acquiring or transferring necessary knowledge and skills that allow people to best perform either in their academic professions, or in their business endeavors. Innovation and

entrepreneurship education may be considered as a particular type of quality education pushing intellectual capabilities to go beyond highest levels of understanding or comprehension to produce new knowledge or add enlightenments, invent and innovate, and thus transform knowledge into marketable outcomes.

For the related total quality management to be effective there is a need for competent and devoted leaders, besides quality students and instructors, adequate resources, evolving standards and limited complacency, in particular. In such a context, organizations will be called to move from relying on comparative advantage to gaining continuous competitive advantage, through quality graduates, talented or innovative people. In general, citizens, too, could contribute, but only when they receive quality education or training, and therefore behave entrepreneurially supported by a culture of innovation. In a healthy cultural context, creativity and innovativeness have to be free of time and resources wasting, egoism, nepotism and unaccountability.

THEORETICAL BACKGROUND

During the last decades, the question of effective integration of economies and education systems with societies has been a major concern of many researchers. Truly, the simple existence of actors is not sufficient to gain competitive advantage; it rather needs coordination, conscious and proactive actions (Aranguren and Larrea, 2011). The knowledge spillover theory (Acset al, 2005) pointed out the need for new firms, because almost always “economic agents (entrepreneurs) outside existing firms seek out and apply knowledge spillovers to generate innovative outputs by creating new firms” (Hann, 2008, p. 80). With the limitations of the public sector, private businesses become crucial, even though this does not occur

spontaneously, as there is a need for incentives, education and training.

National innovation systems (Lundvall, 1992; Freeman, 1995) and triple Helix platform (Etzkowitz and Leydesdorff, 2000) have also emphasized linkages between industry, government and education, since none of these is able alone to influence society's progress without the others' support. For his part, Etzkowitz (2004) strongly argues in favor of the so-called entrepreneurial university for its particular role in transforming knowledge from laboratories to the market through creation of spin-offs and start-ups. In this context, social and economic progress should equally be sought by all parties, including central and local governments, industry, public and private education institutions and the public at large. Otherwise, disparities and problems will emerge, leading to instability and no sustainability.

The role of education institutions is particularly important because they cannot anymore remain as simple providers of knowledge, as such. In today's world, education for the sake education has no useful meaning. Obsolete knowledge, classical teaching and learning methods that do not respond to enhance active contributions based on practical skills, besides cognitive capabilities, are rejected everywhere. In the field of entrepreneurship, it is quite possible to separate between the notions of education and teaching, but both have to be combined to offer a comprehensive and fruitful impetus to learners (Fayolle, 2007). My personal teaching experience allows me to affirm that more and more Arab students favor real practice and hands-on experience to pure theoretical learning in colleges and universities. In the world of business, people will need not only managerial skills, but also entrepreneurial ones. Through proactive learning, mentoring, incubating, provision of advice and guidance, education institutions and

related centers can therefore respond and play a constructively positive role in society.

Due to their speed, low cost, wide and instant connectivity, information and communication technologies (ICTs) and globalization have also and further created new channels of generating wealth and growth (Audretsch, 2007). Nowadays, illiteracy with regard the use of ICTs and digitalization is a major shortcoming, that cannot be overcome, unless through cultural development and education at various levels (Ameen and Gorman, 2009; Jewels, 2011). Today's established paradigm has consequently triggered a shift towards using modern devices and systems, and deliberately seeking and exploiting ideas and innovations based on information and knowledge, with the view to build competencies, solve problems and offer more and better products, goods and services. Nevertheless, the development process may still be incomplete, if launching new start-ups and businesses is required, thus the need for entrepreneurial capabilities based on quality education and practical training, besides stimulation.

Growth and development are the outcomes of human beings' thoughts and actions within given infrastructural and cultural contexts. Significant outcomes cannot be achieved without physical and intellectual capabilities, in particular. This is why it is argued that building and preserving the so-called innovation capital is central in the overall development process (Abouzeedan and Busler, 2005). When governments promote higher education but lose their talents, it is a clear indication that there are major shortcomings in their policies. By default, networking and partnership with local and foreign firms, adequate legislation and business incubators and environment are all of great support to the development process (Aubert, 2004; Marshall, 2004; Klonowski, 2007; MacCormack, 2007; Wu et al, 2008). Specifically, when a

culture of innovation prevails, involving positive attitudes towards work, highest performance levels, critical thinking, taking initiatives, venturing and clustering, positive progress can be expected (Porter, 1990; Ali, 1993; Rice, 2003; El Namaki, 2008).

Interviewing David Audretsch, one of the leading specialists in the subject of entrepreneurship, O'Regan and Maclean (2009, p. 110) report him stating that an entrepreneurial society is an environment "where there is a rethinking of fundamental economic and business ideas, where innovation and entrepreneurship emerge as the driving forces of competitiveness and growth, but institutions and public policies facilitating innovation and entrepreneurship play a key role". In other words, an entrepreneurial society is one that seeks social, economic and technological progress through exploitation of ideas, insights and innovations for the benefit of the present and future generations. Moreover, exploitation of innovations should benefit the largest proportion possible of citizens or people, otherwise they may not be "socially" good or desirable (Soete, 2011).

Towards entrepreneurial societies, governments have the task and responsibility to provide necessary infrastructure, incentives, effective laws, as well as entrepreneurship education. The particular importance of the latter is that it is the main source of enlightenment and knowledge to do business effectively. People are entrepreneurial when they keep observing and thinking about what is around them, seeking opportunities and creating businesses not only to become rich or self-independent, but also to contribute to economic, social and cultural development. An entrepreneurial society would therefore require more than simply a change in business perspective to increase the number of businesses per se. It would require a substantial change in culture (Kayne and Altman,

2005) with regard to creativity, effective use of time, seriousness and productivity at work, accountability and ethical behavior in general.

Fundamentally, entrepreneurship is not about businesses only, but has profound impacts going beyond economics (Schramm, 2008). From a behavioral perspective, it is mainly about attitudes and conducts that lead to generating or creating solutions, increasing value-added, wealth, well-being and satisfaction, either by individuals or organizations. As governmental employment has its own limits, which means that it is not practically possible to secure jobs for all, there are always people with ideas, insights and innovations. They may wish to exploit them directly, by establishing their own businesses, either for profit or non-profit purposes, such as technological and social advance. Self-employment could therefore be regarded as an attitude that graduates should have in mind while pursuing their studies or training, be they in business or non business fields. If entrepreneurship should be used as a strategy for economic development (Kayed and Hassan, 2011) it cannot be limited to the creation of businesses. Learning and using knowledge are crucial, hence the relationship between education, training, knowledge and practice in the real world. For success, responsibility is, however, largely advocated to be shared between public authorities, institutions, educators, parents and families.

In many western countries the entrepreneurship culture is widely established. Citizens, researchers and graduates, in particular, are encouraged to think business with greatest possible contributions to social, economic and technological progress. The notion of entrepreneurial university is also extending and refers to a type of institutional setting linking higher education to the local economy and community. Expected outcomes range from more job creation, greater business opportunities,

to consequently growth and competitiveness. In a number of newly industrializing and emerging countries too, one could find universities that are not alone engaged in entrepreneurship education. Lower level education, in both public and private institutions, is actively participating. Moreover, relevant training is offered throughout the year, including summer and in all types of entrepreneurship that involve innovative ideas and projects, supported by real-world practice.

Surely, universities cannot be the only place, where entrepreneurship could be learned, but ideas and projects would be more valuable with advanced scientific and technological knowledge-based contents, or high value-added outcomes. On the other hand, the need to integrate economics, management, ethics and some other social disciplines into scientific and technological applications is more important than ever before (Oukil, 2010). Obtaining a degree, as high as possible, is certainly not an end in itself; it should help to acquire more and advanced knowledge and to make practical use of it in whatever field to produce quality graduates or other outcomes. This could then help explain a fundamental distinction between doing any business and being innovative and entrepreneurial. People with no education may be successful in investing their money to make profit and grow, but those with education and training would have a better understanding of how to do things better and more advanced, and thus aim at objectives beyond making profit, to benefit citizens, economies and societies. Failure to achieve such objectives should, however, be accepted, and the role of education institutions is to help reduce such risk.

A fact is that entrepreneurship is gaining more and more prominence and becomes a largely demanded subject almost everywhere. In a very recent study carried out by a business firm, it was revealed that entrepreneurship was ranked among

the top five subject areas chosen by MBA students from seventy nine countries around the world (carringtoncrisp, 2011). According to this same study, the demand for entrepreneurship courses has greatly increasing (50%), as its ranking was among the top ten in the previous year. i.e. 2010. In general, today's students are convinced that even if one has a good idea, but having weaknesses in managerial knowledge and skill cannot systematically be acquired, except by active learning, mentoring and good leadership. When leadership is not engaged in improvements and total quality management, performance could be negatively affected (LaKhalet al, 2006).

WEAKNESSES OF MENA'S EDUCATION SYSTEMS

Listed in an alphabetic order, the MENA region comprises countries of Algeria, Bahrain, Egypt, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Syria, Tunisia and the United Arab Emirates. Each of these countries is different from the others in terms of resources and development strategies. Historically, trade and commerce have been the main common business activities of people in the region. Entrepreneurship as shaped by modern thinking and practice has started in the region only in recent decades or even years, with variation from urban to local and big and small geographical areas, as well as type of activities taking place. According to El-Namaki (2008), this late emergence of entrepreneurship as is known in the developed countries is due to either objective and/or subjective factors. Most paradoxical is that, while the number of firms, including family ones, has greatly increased in the region, along with improvements in the business environment, entrepreneurship education offering itself has still been much lagging behind.

There is little doubt that education systems in the MENA countries have experienced important transformations, either

from quantity to quality approaches, from non science/technology-based to science/technology emphasis, from theoretical to practical focus, or from publically funded and monopolized to public and private provision, and more recently more open with establishment of foreign universities' branches. Throughout these transformation phases, curricula have been modified and up-dated usually on a benchmarking basis with world top schools and universities. New courses have also been introduced, and outreach activities have been added as local industry gets more involved. Since then, Arab graduates have been offered more possibilities of choosing their majors, elective courses and future carrier orientation, i.e., choosing between professional activities or launch their own firms or start-ups.

However, an important dimension of the educational efforts not yet satisfactorily dealt with is the extent to which MENA universities and colleges introduced and implemented effective changes in both teaching and leadership styles allowing for quality graduates with entrepreneurship and innovation abilities. The rest of this paper is attempting an answer with regard to the following aspects: accreditation, entrepreneurial drive and outreach activities. The main idea is that entrepreneurially driven institutions are normally characterized by adequate structures and resources, well coordinated departments or units, provision of quality courses or training, incentives for innovation and an evolving business culture.

Accreditation

In their efforts to concretize transformations introduced in the education field, more and more universities in the MENA region apply for international academic accreditation. Prior to that, or at the same time, quality assurance and total quality management tools have been introduced to educational institutions, particularly at higher levels. The process involves

implementation of international standards with the view to up-grade processes, quality inputs and outputs, i.e., education norms and quality graduates. As a matter of fact, almost all world top business schools are offering entrepreneurship courses/programs, thus showing the important relationship between accreditation and this subject. With regard to the MENA region available data show that its countries differ very much in their efforts with regard to establishing accredited schools able to provide entrepreneurship courses or training, as in the following table.

From the above table, it can be seen that sources differ in their reports, but that both Saudi Arabia and United Arab Emirates are in equally in the lead with highest number (8 each) of accredited schools among Arab countries. Within the whole Arab world, more than 40% of the MENA countries are reported not having similar schools. Only 8 or 9 out of the 14 MENA countries have respectively been reported by the two above sources to have accredited schools or colleges. Strikingly, this represents only a mere 2% of the total of 1182 accredited schools worldwide (AACSB, 2011). What is however very important to emphasize is that gaining accreditation is one thing and sustaining is another. On the other hand, weather entrepreneurship courses or training are offered by business or non-business schools, the much fundamental

Country	Number of leading business schools able to provide entrepreneurship/innovation courses/training	Accreditation sources
Saudi Arabia	6-8*	AACSB, AMBA, ACICS
UAEmirates	5-8*	AACSB, IACBE
Egypt	2	AACSB
Kuwait	2	AACSB
Lebanon	2-4	AACSB
Morocco	2-1	EFMD-EPAS
Qatar	1	AACSB
Tunisia	1	AMBA

Sources : <http://dinarstandard.com/tag/special-reports/>

* <http://www.aacsb.edu/publications/businesseducation/2011-data-trends.pdf>

Table 1:
**Leading Business
Schools in Selected
MENA Countries
(2011)**

thing is for the accreditation to be sound and reflected in the appropriate behavior of Faculty, students and staff of the concerned parties. Sound accreditation implies that offered courses and teaching are well coordinated, rich in knowledge contents and respond effectively to modern learning needs.

In practice, general observation unfortunately allows to record negative attitudes among the above community members of the region. Even though it is religiously forbidden, cheating and plagiarism, for instance, are still reported among students of all levels of educational institutions. There are also Faculty who do not share their knowledge and work with others, who do not keep their courses and teaching methods up-dated, or who are reluctant to be involved in learning and training workshops, or who even subcontract their teaching activities to others with even lower degrees and qualifications. Just as there are also administrative staff members who do not strictly apply the confidentiality principle regarding, for instance, committees' reports, salaries and promotion applications or faculty's personal evaluation and so on.

If accreditation means adopting given professional work standards and norms, it is unfortunately not taken seriously in many of MENA countries' universities. Formal and a huge campaign of awareness and engagements of socially responsible leaders and institutions are needed at all levels before any implementation of the accreditation process could provide its fruits on the ground. Factually, ethical conducts and codes are set and announced through various channels, but practice and correct behaviors are not dominantly prevailing.

Entrepreneurial drive

In terms of structures, very few higher education institutions in the MENA region have units or department, let alone specific

centers for purposes of incubating ideas and projects. Given the fact that historically Arab countries have established only 20 incubators, of which 13 incubators in the MENA region (Shalaby, 2007), the average number is less than 1 incubator by country. If this is divided by the number of universities in the same region, the result will be extraordinarily insignificant. On the other hand, where innovation centers and related structures are created, they are often separated from each other, thus creating possibilities for redundancy and sub-exploitation of resources. Something else which is very unfortunate is lack of information, as very few students could be found aware of the existing facilities devoted to help nurture innovative ideas in their universities.

The systematic transfer of knowledge from laboratories to market does not seem a strategic target of most education institutions in the region. Patents are usually granted to a number of universities as well as to organizations in the region but tend to remain as beautiful assets in drawers and offices or shown in exhibitions. Possibly because of their small number, spin-off companies created by universities in the region are statistically unknown. As an indicator of real progress made by the MENA countries, it is therefore important to follow up their move from factor-driven economies to efficiency-driven ones and then to innovation-driven ones (Acs, 2010). According to Bashiti (2011), 7 Arab countries only, representing the greatest majority of Arab countries, are at the first phase, while 2 are at the second phase and only 1 is at the third phase. Overall, this suggests that there is a long way to go before Arab and MENA countries will altogether show significant progress.

Against the trend, for example, in the USA, Europe, China, South Africa, and Malaysia (Mason, 2011) courses offering with emphasis on entrepreneurship and innovation are acutely lacking in the region as a whole. Only few universities in Saudi

Arabia, United Arab Emirates, Jordan and Oman have made attempts to provide relevant courses or programs, either by business or engineering departments or colleges. Worth mentioning is that with the view to fill in the gap, some very good initiatives have been launched by the private sector, including “Injaz”, “Intilaaqah,” “Berytech”, “Bidaya”, “Intilaq”, etc. However, given the sharp need for entrepreneurship education, its urgent provision remains crucial to strengthen awareness and detect all possible potentialities. Core or introductory courses on innovation and entrepreneurship, talks given by innovators and/or entrepreneurs, conferences and workshops in various time periods could be useful to enlarge individuals’ exposure to the world of modern entrepreneurship. In particular, a first level introductory course on the subject to university students should help in this matter.

Fundamentally, a whole culture of entrepreneurship is missing in most of the education institutions of the MENA region. Many of them are still structurally not enabled with entrepreneurship programs or tools. Worse, provided courses are still much theoretical and away from the world of creative and technological businesses. Much relevant to innovation, is that intellectual property teaching is very limited to a very few institutions in the MENA region. This general tendency exposes students to much difficulties or problems when they graduate and join industry or the market. By entrepreneurship culture, it is meant the learning-based readiness or disposition for making change in thinking and behaving with the view to maximize contributions. Such conditions are obviously incompatible with students’ sleeping mood, late attendance, traditional patterns of teaching, and non-professional administrative behaviors.

Management of education institutions, including universities, research centers and technical colleges cannot therefore

be maintained on a traditional basis. Good governance and tight involvement in society development and economic growth are required, and justified by the fact that integration allows more welfare and fast progress. In cases of shortage of resources, clustering, networking and team-working could be ways to overcome, and consequently reinforce idea generation and problem-solving. Access to ICTs in schools and other educational institutions should be boosted in more scientific and educational manners. This is to say that policies need to be more efficient at points of education and leaning, and that “much deeper institutional reform is necessary to fulfill the policy aspirations, rather than speculating over progress through technology-enriched futures” (Lightfoot, 2011, p.1).

Outreach activities

As already mentioned, links between educational institutions and industry are generally weak in the MENA region, either in terms of effective training opportunities of students or durable research collaboration. Very often coop-work students report incompatibility of their majors or interest with the activities and tasks assigned to them by recipient firms. In terms of contracting research, universities and economies and societies are often apart from each other. When agreements are made, many remain as simple documents without implementations. Besides that, spontaneous recourse to foreign ready-made solutions, technologies, systems, methods and practices are often the case. When signed, research contracts, involving local and/or expatriate researchers and faculty, are mostly linked with the reputation of certain educational and industrial organizations.

In general, big universities tend to contract with big firms, often foreign ones, and this leads to sub-exploitation of local initiatives, potentialities and innovations, which could come from small institutions or companies. In other words, links

and linkages between firms and higher education institutions are dominantly based on names rather than ideas and quality projects. The real paradox in the MENA countries is that the reported shortage of qualified personnel, as a key innovation problem (AIL, 2006), is not necessarily because of inexistence of innovators and capabilities, but because talents and competencies are not locally captured, monitored and involved in the innovation process as it should be. Another related and severe shortcoming in almost all MENA universities is the absence of research activities and post-graduate programs on entrepreneurship and innovation.

Regarding female entrepreneurship, the MENA region seems to have more problems than those in other countries. Not only women have little easy access to outside activities as their men counterparts, but also subjective obstacles do also apply to them. This makes no surprise that women talents in the MENA region are more and more oriented to take public responsibility positions rather than engaging in their own private endeavors and launch their businesses. This seems actually similar to what is observed in developed economies, where recent research has identified that highly educated women seem to choose other career options than self-employment and entrepreneurship (OECD, 2004). Worst and against all expectations, there are today institutions, in some of the MENA countries, which still hesitate or refrain from opening female sections, let alone mixed ones, and at both undergraduate and MBA levels. The deception is however greater as the case concerns scientific, technological and management sciences' fields and disciplines.

CONCLUSION AND RECOMMENDATIONS

The drive, towards innovative economies and entrepreneurial societies, cannot be a simple formality with instructions on

paper. It should evolve around educating and training people to be critical with the view to improve or conceive new things and implement them most efficiently. For this purpose, provision of quality education is necessary. Graduates should become knowledgeable and skillful to positively impact their surroundings. To maintain such quality, contents and standards need to be elaborated and implemented as rigorously as possible. Overall, a whole entrepreneurship ecosystem, with coordinated efforts between governmental institutions, industry, private business, start-ups and entrepreneurs, is justifiable.

Gaining sustainable competitive advantage is only possible when ideas, insights and innovations are created, commercially exploited for the benefits of present and future generations, with consideration of the environmental aspects. In this context, entrepreneurship is more than doing business; it is an opportunity driven attitude and mindset that is applicable across all areas of activities with the view to bring prosperity.

Quality education, of which entrepreneurship/innovation education are essential components, provides learners with possibilities of gaining knowledge, developing skills and aptitudes of doing business following best practices. When the environment is competitive, complex and turbulent, rarely that non-entrepreneurially-based learning and training could help much, apart in cases of exceptionally good luck. Strong emphasis on such education remains therefore very important if a shift to innovation-based economies and entrepreneurial societies is wanted.

MENA countries have much invested in education, and to some extent in entrepreneurship development. However, for more effective policies, there are urgent needs to check for inconsistencies, shortcomings and gaps, particularly with regard to the objective of producing entrepreneurs. Revising education

policies is a major concern for decision-makers in the region, but should involve all parties, namely instructors and academics. No much can be achieved towards entrepreneurial societies and innovation-driven economies if relevant education is not of world best practice and intelligently following the positive trends.

Accreditation and quality assurance systems, introduced in a number of MENA universities could help up-grading quality inputs and outputs, but the whole process should be well monitored continuously. This will avoid stepping back and checking for any deviations due to corruption or incompetence. Awareness should also be prevalent as wide as possible, not only in industry but in all educational institutions, because of the importance of the knowledge ingredient. Much relevant also is strengthening the entrepreneurship culture and behavior that eliminate time wasting, routine and unproductive behaviors, reliance on others, pure consumption tendencies, illegal, easy or fast business activities that may harm people and the environment.

BIOGRAPHY

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