

Conference Paper

Building an Agile, Competitive and Dynamic Entrepreneurial Ecosystem to Create a Startup Culture, Startup Nation, and a Startup Region: Case of Egypt and the MENA Region

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Abstract

In today's economic, business and social spaces, communities and societies around the world constantly face a set of challenges related to growing unemployment, economic development, changing market dynamics and tough business conditions amongst others. However, these societies and spaces are also regularly presented with a variety and spectrum of opportunities, given the continuous development of new markets, the growing role of cutting-edge technology platforms, especially with the growing penetration and impact of the fourth industrial revolution, the evolution of the digital economy and the global widespread of entrepreneurial initiatives and activities around the world in both the developed world and in emerging economies.

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1. Introduction

Egypt in specific and the Middle East North African (MENA) region at large are gradually and effectively experiencing a technological and societal transformation that could be the answer to a better and prosperous future for its next generations. The beneficiaries today represent a small segment of the community, but this could be scaled-up across the community at large with the proliferation of artificial intelligence and the increasing number of smart phone users across the MENA region. The critical success factors include the spread of information and communication technology across the MENA region, the formulation and implementation of an effective and holistic education and lifelong learning vision, strategic objectives and targeted goals as well as the capitalization on the invaluable wealth represented by the young population, where on average, regionally, more than 30 percent are under the age of 30, representing a promising human capital resource that can turnaround the future of the region. Respectively, universal access to proper education and to emerging innovative technologies would

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mean effective access to the world around them with ample opportunities regardless of time and distance barriers. There has never been an open access environment to a repository of knowledge and learning platforms, tools and applications as the one that the world is witnessing today; and the more societies capitalize on them, the more they will become agile, adaptive, competitive and transformative. This is also providing a window of opportunities to expand the notion of start-ups and innovative businesses including online ventures being created while reaching out to a wider, more diversified and expanded global community of consumers enabling more innovation, creativity, entrepreneurship, responsible business, as well as a large variety of socioeconomic opportunities and endeavours.

Entrepreneurship has, over the last decade, dominated various societies, communities and markets in both developed and emerging economies, given the growing tech-savvy and interconnected young, ambitious and promising populations around the world and the potential opportunities offered by emerging information and communication technologies, tools and applications [1]. However, innovation and creativity in general and the state-of-the-art technologies in particular cannot solve all the problems or answer all the economic and societal challenges that have developed over many decades, especially in emerging economies [2]. Education, policies, laws and regulations, procedures, logistics, markets, speed and many more building blocks represent integral components of the holistic enabling environment that needs to be in place for the development and effective realization of entrepreneurial activities and resulting implications. Changing the mindset while aligning to societal norms, values and beliefs would be the key. Therefore, regular adaptation to changing local market conditions is important while keeping an eye on global trends and directions; and consequently, the notion of glocalization becomes invaluable to cater for local needs while aligning with global directions. It is important to emphasize that there is no one size that fits all and plug and play across different regions, countries and communities would not be the most effective nor sustainable option.

While emerging technologies surely represent an enabling environment that can make a difference, such technologies should be coupled with the proper legal, regulatory and support environments and an effective and comprehensive entrepreneurial ecosystem [3]. Having said that, building an entrepreneurial ecosystem requires engaging diverse economic stakeholders across the different stages including the private sector, the government sector, non-governmental organisations and other institutions and individuals that can enrich and effectively support the creation and sustainability of an entrepreneurial culture. Moving forward, efforts should be directed

towards the development of an ecosystem conducive to high-tech and non-tech-based entrepreneurship and their associated implications across the different sectors of the economy [4]. This should be coupled with the required changes, amendments and introduction of various needed and required regulatory, financial, trade, legal, educational and lifelong administrative systems and applications [5].

The culture of entrepreneurship should be built in-sync, bottom-up and top-down, seamlessly and simultaneously. This can never be a one-way street, it has to be a collective, collaborative and integrated effort that complements, supports and pushes the ecosystem forward. It is a mindset that transforms society to think entrepreneurially rather than being just focused on establishing enterprises [6]. The proper alignment of entrepreneurship as a way to do business within the society needs to take place. What is needed is the creation of an environment where different entrepreneurs can thrive [4]. The freedom to innovate and excel should be availed to all. Noise should be created all along the process to provide the required momentum, passion, drive and energy. The role of youth, practitioners, academics, industry experts, business leaders, mentors, investors, innovators, educators, trainers and more can never be discounted within the entrepreneurial space. However, it has to be a collective effort where everyone is effectively engaged, empowered and successfully contributing to creating an entrepreneurial culture that is dynamic, iterative, adaptive and competitive [6].

In today's time and age, competing while cooperating is becoming an integral element of global market dynamics. Coopetition is gradually taking centre stage and is becoming a key building block in the creation of an effective, scalable and sustainable entrepreneurial ecosystem. Coopetition is the name of the game and has proven rewarding when integrated within the business model deployed. Such ecosystem will gradually become an enabling environment where collective learning and understanding is taking place; where everyone is learning something different, something new; where individuals and groups compete with each other and where everyone is exploring innovative concepts and techniques as well as exchanging ideas, experiences and lessons learnt.

There is never a perfect time to start promoting entrepreneurship but, whenever the ball starts rolling, it has to be disseminated across the community and it has to be open to taking risks, facing problems, overcoming challenges, as well as venturing into the unknown, and be ready to learn from failures and capitalize on successes [1]. In other words, acknowledging success and reflecting on the actions taken to

achieve it is very important. However, it has to be complimented with celebrating failure and learning from the mistakes and the decisions leading to it, which is as important and as valuable moving forward. Success is only one element of the journey and can never be appreciated or valued unless it is following a series of failures and setbacks that represent an integral and an important element of every entrepreneur's journey. Moreover, thinking big from the outset definitely helps the dissemination of an entrepreneurial culture, and for emerging economies such as Egypt, it could be the ideal transformational socio-economic platform that can help improve and grow the economy [7].

Since the mid-1980s, Egypt has been gradually experiencing a technological transformation with varying implications on the different sectors of the economy. This has been coupled with several socioeconomic implications and opportunities that could hold the key to a much better and prosperous future. The crucial and primary building block in the equation has always been and remains to be the human capital factor, next comes education and lifelong learning as well as the universal technology diffusion across the different segments of the society, irrespective of the socioeconomic and market demographics. Egypt's population is growing at a rate of 2.1 percent, which is equal to over 2.6 million people every year. Moreover, technology access has been rapidly increasing across the country with over 49 million Internet users and around 65 million unique mobile users reflecting 50 and 66 percent Internet and mobile penetration rates, respectively [8]; with more than 39 million active social media users and over 24 million using smartphones creating ample opportunities for the digital economy to grow including business transactions, as well as electronic commerce applications and more. It is worth nothing that in Egypt, no less than 60 percent of the population is under the age of 25, the highest in the MENA region, reflecting a young society in a nation that is home to more than 95 million citizens [6].

The elements of youth and technology provide a unique opportunity for change and improvement, and their intersection with innovation and entrepreneurship could be the enabling platform. Such blend could also provide the venue that, when coupled with the right leadership, team, strategy, technology deployment and business model, could deliver the largest electronic commerce company in the Middle East such as the case of souq.com which was acquired by Amazon in 2017 for about 600 million US dollars [2]. A few years earlier, in 2009, Maktoob, a webmail service with Arabic support, was acquired by Yahoo! for 164 million US dollars [5]. Such emerging successful start-ups can evolve from most emerging economies including other countries in MENA, Egypt included. In fact, with the proliferation of a large number of incubators

and accelerators across the region, including but not limited to Oasis 500 in Amman (Jordan), Flat6Labs in Jeddah (Saudi Arabia), Beirut (Lebanon), Abu Dhabi (UAE) and Tunis (Tunisia) and Turn8 in Dubai (UAE), more of these start-ups who aim to be the next unicorns could be on their way to take the global market by storm [9].

Universal access to information and communication technology diffusion means unlimited access to knowledge, people, opportunities, ideas and the world at large, regardless of time and distance barriers and should never be confined to certain segments of the society [1]. Realizing that a transformational impact would require sustainability, scalability and inclusiveness across the society at large, this in itself can give the youth an opportunity to provide the infrastructure required for a globally competitive technology rather than just being a liability. Inclusiveness and a conducive enabling environment is a key platform that promotes creativity and innovation.

Investing in creating a pool of energetic, passionate, technology-savvy entrepreneurs and change agents who can make a difference is exactly what emerging economies need, Egypt and many countries in the MENA region included. Creating an entrepreneurial culture is never a one-man show nor the playground or the creation of one organization, whether public or private. It is the collective effort of many constituents in the society towards common goals, and that includes but is not limited to creating jobs, establishing enterprises, educating youth, establishing laws, setting the regulatory environment, supporting the private sector, facilitating the investment space; all to help boost economic productivity. Some of the key invaluable elements that need to be addressed include: (a) integrating and embedding the entrepreneurial skillset and knowhow into the education system, which for some countries remains untapped; (b) accessing financial resources and microloans is still limited and challenging; (c) transforming the legal and regulatory frameworks that are impeding the quick, effective and efficient establishment of start-ups and small- and medium-sized enterprises (SMEs); (d) disseminating the entrepreneurial projects to reach different segments of the society; and (e) encouraging female entrepreneurs [10].

Countries in the MENA region and in many ways emerging markets at large need to bolster the recruitment of fresh graduates in the private sector as opposed to the public sector and the civil servants' space at large. This is the path for a progressive economic development and growth. Being entrepreneurial and an agent of change has nothing to do with where one serves. It is the attitude, role, effectiveness and efficiency combined that really counts. In the case of Egypt, no less than 7.1 million public servants represent a huge pressure on the government and public administration [11]. This has to change;

yet, that figure leaves a large segment of the population ready for a more robust, competitive and mostly service-oriented private sector.

For every challenge, there is an opportunity that can be created and that is the entrepreneurial spirit that needs to be embedded in the popular mindset regardless whether the employment is the private sector, public sector or the government. The more diversified and varying challenges there are, the more opportunities and breakthroughs that could be created, given the deployment of an innovative approach that is customized to local markets [6]. Such spirit and culture need to be created at the school level. It is how children are being taught, the curriculum they are exposed to, the ideas they exchange, the learning delivery approach they grow accustomed to. It is the critical thinking, problem solving, initiative taking and confidence building in the youth's character while growing that makes all the difference. It is the competitive, responsible, adventurous, confident, knowledgeable, agile, tech-savvy and exposed individuals who will make all the difference in the new world of artificial intelligence, digitization, robotics to mention a few.

In many ways, SMEs are the primary avenue by which entrepreneurs provide the economy with a continuous supply of ideas, skills and innovative products and services. In countries with a 'youth opportunity' such as Egypt, SMEs become a possible platform for employment and job creation in major cities but more importantly in remote locations and underprivileged communities. Today, SMEs (including micro enterprises) employ the majority of the workforce in Egypt, around 75 percent of the workforce and growing, and account for no less than 95 percent of the nation's GDP; around 10 percent or more are led by women and 90 percent of the total volume of establishments are family businesses [6]. Moreover, according to the economist, 25 percent of start-ups in MENA are founded by women [2]. However, the majority of SMEs are not registered, so most probably, double these figures are active in the informal 'underground' economy, which is probably the neighbourhood of 80 percent of the overall economy in the case of Egypt. A variation of these figures, given the size of the economy and that of the population could also be found in other countries across the MENA region.

In 2015, in an attempt to promote and improve inclusive growth and employment, the Central Bank of Egypt (CBE) began to expand lending to SMEs and announced that credit to SMEs must account for at least 20 percent of any commercial bank's loan book by 2020, a total that could easily reach 25 billion US dollars (before the November 2016 devaluation) as opposed to the current 5 percent of bank loans that are provided

to SMEs. Such decisions are coupled with a growing number of support institutions represented by associations, non-governmental organizations and the private sector, all promoting a growing, collaborative and effective entrepreneurial ecosystem that is diversified, technology-driven, responsible and committed to society. In February 2017, the CBE set below-market interest rates for SME loans, ranging between 5 and 12 percent based on the company size and sector. Moreover, in May 2017, the CBE launched 30 billion Egyptian pounds (1.7 billion US dollars) microfinance initiative targeting 10 million beneficiaries over four years, allowing microfinance loans to count towards banks' 20 percent quota for micro, small and medium-sized enterprises' (MSME) funding. In January 2018, a draft law to develop SMEs was submitted to the parliament, all to encourage MSMEs to join the formal economy with increased access to financing as well as other incentives.

Less than 10 years ago, such interest in the world of entrepreneurship and startups was nascent and limited. However, gradually, it started demonstrating the magnitude of the potential and the untapped opportunities in the market. In the context of Egypt, some of the main players that were established and/or joined the entrepreneurial ecosystem over the last decade include the American University in Cairo's Venture-Lab and Center for Entrepreneurship and Innovation, Flat6Lab in Egypt, Injaz Egypt, the Egyptian American Enterprise Fund, Cairo Angels, the American Chamber of Commerce in Egypt with its entrepreneurship and innovation activities, Endeavor Egypt, RiseUp Summit, Rise Egypt, Nahdet El-Mahroussa, the Technology Innovation and Entrepreneurship Center, Pyramids 138, Ashoka, Techni Summit, A15, Algebra Capital and many more that are in the process of being formed and/or increasingly contributing to a collaborative and increasingly effective ecosystem that can have sustainable and scalable impact on the economy and the society at large in Egypt. Across the region, the proliferation of institutions promoting, supporting, mentoring, financing and engaging with entrepreneurs and start-ups have been impressive and increasing steadily over the last decade. One of the key platforms that was created is wamda.com, which is a platform of integrated programs that aims to accelerate entrepreneurship ecosystems throughout the MENA region [12].

Egypt is not known for being rich in oil, but it is definitely blessed with one precious resource that in many ways is the 'invaluable resource' of the 21st century, and that is human capital. This is an incredible force that could take the country forward through the creation of a start-up culture that could be scaled-up across the nation's different provinces, helping to establish a start-up nation but that could also proliferate across other emerging economies given that most have similar demographics as Egypt

such as the MENA region and contribute to the creation of a start-up region. Investing in human capital should always be the priority for individuals, organizations and societies to be able to constantly move forward, develop and progress. It is important to note that entrepreneurial education is an invaluable building block and will help change how people think, work, react, generate ideas, perceive opportunities, promote innovation, develop alternative solutions, become impact-driven and more [13]. Some people claim that entrepreneurship cannot be taught, while others believe that while some are born gifted with entrepreneurial skills others are not [14]. It is worth noting that people differ and that each one has an advantage that he/she can capitalize on but there is no doubt that all skills and capacities can be shaped and improved through customized awareness and orientation programmes with the proper and continuous guidance and mentorship.

The required education-knowledge-experience infrastructure, in other words, life-long learning, goes beyond the boundaries of the classroom, school or university, it is the real-life market knowledge, observations and experiences that count and the way the community prepares its current and future generations to be ready to unleash their potentials. It is more related to openness, critical thinking, innovation, inclusiveness, being responsible, forward thinking and moving from the traditional and the predictive mindset into the unconventional, exploratory, discovery and the uncertain creative out-of-the-box approach. Universities, professional and executive development institutions around the world offer entrepreneurship programmes and activities to nurture an entrepreneurial spirit and provide the potential entrepreneurs with the right tools and methodologies to take their ideas to the next level and launch their start-ups; the MENA region needs more of these programmes whether offered at schools and universities or by executive education, professional development and training institutions; both formally and informally, through emerging interactive and blended technology-based delivery techniques and methodologies.

The proper orientation, awareness, training and education of entrepreneurship should never be confined to the classroom. It is the real-life cases, the extracurricular activities and the exposure, interaction and exchange of experiences that make all the difference. Therefore, the role of both stand-alone and university-based incubators is becoming the key and represent a primary stakeholder in creating a start-up culture in different societies around the world. The notion of incubators-accelerators enables an environment that blends academic, business, industrial and professional experience; all representing contributing factors to a flow of innovative ideas that could be taken to the next level through the commercialization of products and services.

One of the key strategic directions that could have a multiplier effect in creating the entrepreneurial ecosystem and in maximizing and disseminating its associated impact would be the establishment of an incubator-accelerator in each higher education institution across the MENA region. This will be a true game changer, it will seamlessly change how educators think of education, and how learners perceive, absorb and interpret curricula and knowledge. Blending content with real-life experiences and being constantly attached and interacting with the marketplace changes and dynamics will have invaluable implications on the society moving forward.

In the years to come, startups and MSMEs will be transformational for different economies, especially those embracing the power and reach of youth, innovation, technology, education as well as the digital and shared economy. Start-ups and MSMEs can make a difference if the proper legal, investment, regulatory, educational and other support mechanisms are in place. No scaling-up can happen unless the right infrastructure and 'infostructure' is timely, disseminated and institutionalized. MSMEs have the potential to create thousands of jobs and enterprises in the years to come and that is exactly what emerging economies need. In the 21st century, young graduates are more than ever eager to start their own business, be self-employed, make a difference and contribute to the society. Unlike previous generations, they are not primarily looking for opportunities as civil servants. They want to take risks, venture into the business world, even if they do not have all that it takes to be successful in a competitive, global and dynamic marketplace. This represents a huge and positive shift in the mindset. In the context of Egypt, traditionally, most Egyptians were risk-averse, preferring the notion of wait and see over taking immediate, not well-studied and deliberated actions. With the need to create over 800,000 jobs every year, the path for development and growth can only be created through a scaled-up agile, competitive and growing private sector-led start-up community [6]. Such community should not be focused only on tech start-ups, there are multiple economic sectors that could benefit from innovative entrepreneurial ventures such as agriculture, industry, tourism, education, edutainment, services and many more. The bigger the base of potential entrepreneurs, the more likelihood a growing number of start-ups will prevail. It is all about scalability and the continuous flow of ideas that can go to the next level.

With 4000 villages in Egypt, the potential is huge, and with challenging conditions, innovation becomes a model by which underprivileged communities have the passion, determination and will to make a difference and improve their standards of living. The best ideas come in desperate times and real motivation happens when people are more challenged economically and socially, so what really counts is human capital

and people's effective role in society as agents of change and, more importantly, the transformational impact they can help realize.

Creating a thriving entrepreneurial culture and start-up ecosystem requires both talented individuals and a receptive and enthusiastic society. Therefore, while spreading the notion of entrepreneurship to a broader audience across the community, there is a need to identify, mentor, incubate, finance, connect and support those who possess natural talents and facilitate their success moving forward. From the theoretical and academic to the practical and applied, a well-established entrepreneurial culture could be on its way to help build Egypt's economy in a more inclusive and impactful way and could as indicated earlier be the platform for a start-up culture, a start-up society and a start-up region. For emerging economies in general and economies in the MENA region in specific, it is time for the development of an effective entrepreneurial ecosystem that is government-enabled, youth-led, private-sector supported and future-oriented.

The intellectual capacities of the youth in the Middle East and their unlimited abilities to innovate is an invaluable factor in the years to come. Therefore, enterprising youth represents the future of a democratic and diversified MENA socio-economic landscape [13]. Therefore, the key to the exponential development and growth would depend primarily on investing in human capital as a fundamental pillar for transforming the economy. Moreover, there is a need to work closely with both existing start-ups as well as entrepreneurs who are focused on growth and impact. From a regional perspective, it could be really effective to create a platform for entrepreneurs from around the region to share ideas, experiences, knowledge as well as to benefit from peer mentorship and the exchange of entrepreneurial lessons learnt including successes and failures. The notion of diversified incubators-accelerators across the region that are interconnected through a collaborative platform could scale-up a start-up community that could be driven by emerging economical and societal needs of a region that is home to over 400 million people, mostly youth.

In brief, Egypt in specific and the MENA region at large need a full-fledged entrepreneurial uprising that can transform the lives of millions of young, energetic, passionate, tech-savvy citizens that represent the agents of change who can make a difference and who will lead the region moving forward [11]. In the case of Egypt, a country of more than 7,000 years of history is still the land of opportunity, and so much of it remains untapped; the room for improvement, development and growth is huge and unlimited. In many ways, the same can be said about many countries throughout the MENA region. The world is living in the age of acceleration and emerging countries

around the world including the Middle East and the African continent should capitalize on that today. Time is now to make a real, effective, sustainable and scalable societal transformation, and technology-enabled entrepreneurship and innovation is very much the way to do it.

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