

# G.G.A. Note...

Global Growth Advisors - Global Strategic Consultancy Group

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## Cloud Computing - *The Advent of Mass Entrepreneurship*

*A Report on Middle East & Africa*



## Introduction

Dear Readers,

The next big phase in the internet revolution - known as cloud computing has already arrived. And it is a significant one, especially for societies in the Middle East and Africa. It changes the underlying infrastructure of information technology for governments, businesses, academic institutions and across many industries.. Dramatically lowering costs and opening the door for ordinary people with few resources to build businesses in the internet economy with speed. It is a tool for mass entrepreneurship and catalyst for innovation.

In this report our GGA Partner, R. Rahmani Ph.D. explains how great synergy will be created by merging the greatest resource of the Middle East and Africa - the creativity of its people - as well as today's development in internet revolutions.

GGA has expanded two Middle East based cloud computing / virtualization ventures to its portfolio in 2013. For more information regarding GGA Portfolios do not hesitate to contact us.

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## Untapped Wealth

Much economic development in the Middle East and Africa has focused on developing natural resources such as oil, minerals, or lumber. But the greatest resource of the Middle East and Africa has remained largely untapped - the creativity of its people.

The Middle East and Africa have a booming population that are increasing educated, but high unemployment and lack of opportunity have limited this great potential. In 2012 in the Middle East and North Africa unemployment for youth (ages 15 to 24) was 25%, higher than any other region in the world. Many are educated - in Egypt, Jordan, and Tunisia, unemployment is 15% for those with college education [1]. In Africa, despite GDP growth of over 5% in 2010, unemployment for youth (ages 15 to 24) remained high, creating a phenomenon of jobless growth [2]. The Middle East and North Africa have over 88 million youth [3]. Africa alone has over 200 million youth, making it the youngest population in the world [4]. This challenge presents a tremendous opportunity to spur the next generation of jobs and businesses by empowering entrepreneurship.

Entrepreneurship, especially in the tech sector, is the path by which great innovation is born, solving the burning needs of society and generating wealth for all involved. But there are many barriers to creating a Silicon Valley in the Middle East and Africa. Many countries do not have venture capitals ready to risk capital on startups, instead opting for what they perceive as low risk ventures, such as real estate and natural resource excavation. Further, the overhead of expertise needed is overwhelming, bogging down the project before a single market innovation has been built.

For example, if an aspiring entrepreneur in rural Egypt has a great idea to connect the farmers in his surrounding villages to markets in the city via a targeted social network, then he would first have to find the funding to buy a server, rent space to host the server, pay for internet bandwidth, learn how to setup the operating system and platform, and piece it all together. All this could take several months to acquire and build, and he still hasn't even written a single line of code towards the actual market innovation - the farmers' social network.

And so most innovation in the Middle East and Africa has remained imported, solving only the most general needs of that society and limiting the generation of wealth and local growth.

## The \$0.00 Startup

Quick - how many successful small businesses can you start with no money, relying solely on creativity and hardwork? The answer used to be, "None". But with the advent of a new technology, cloud computing, the answer is, "Thousands".

Cloud computing is the next big step in the internet revolution. And it is a significant one, especially for the Middle East and Africa. It changes the underlying infrastructure of IT for businesses, dramatically lowering costs and opening the door for ordinary people with few resources to build businesses in the internet economy with speed. It is a tool for mass entrepreneurship and catalyst for innovation.

Cloud computing transforms that way we look at computers. Traditionally, all the hardware, platforms, software, and data we needed were located in a box underneath our desk. Cloud computing replaces each one of those functionally, as a service provide through the internet or internal network. Do you need the power of a thousand processors? Don't buy them - just lease it virtually through the cloud (e.g. Amazon AWS, RackSpace). Do you need a full office software suite and business intelligence software? Don't buy and install it - just login and use in it on the cloud (e.g. Google Documents, Salesforce.com). Do you want to start the next great company? Don't waste lots of time and capital - just build it on a ready platform in the cloud (e.g. Heroku, EngineYard).

In the cloud model, we only pay for what we use, and we can scale up and down based on our needs with the click of a button. Commonly, clouds start with a free tier for prototyping and testing. Startup cost - \$0.

Let's look at the entrepreneur in Egypt who wanted to build the farmers' social network. Through cloud computing, hard work, and nothing more than a laptop, the farmers' social network can be build and operational within just a few weeks. The entrepreneur did not need to buy any servers or setup platforms, since it is running on the servers and platforms behind the cloud. From day 1, he is working on building market innovations, not overhead. More importantly when the new product is ready, it is instantly accessible over the internet to real customers - it is being constantly tested on the real market and receiving feedback in real-time. If the idea is a hit, then that is when we add money to scale it up. If the idea is a failure, then we quickly learn and try again. Our time to market is weeks not months. Our speed of innovation is continuous.

## The Opportunity

Cloud computing in the Middle East and Africa presents an excellent opportunity. The first opportunity is to invest in locally targeted cloud computing platforms, building the underlying infrastructure for the entrepreneurial economy in the region. It is a distributed risk investment - if 10,000 companies build on your platform and only 2% are successful, then those 200 companies are enough to generate continuous dividends. As those business grow, their use of the underlying cloud will grow, and so will your mutual profits.

The second opportunity enabled by the cloud is a new viable concept - large scale micro-investment. By leveraging both the near zero cost of startups built on the cloud together with the rapid "trial and error" innovation cycle of the cloud, startups can be created with very small funds and market viability can be proven in months instead of years. This means that the same investment budget can be distributed to a magnitude of more startups. So instead of \$1,000,000 funding just a few startups, now it can fund a thousand. This greatly

distributes risk. The rapid innovation cycle allows startups that will not succeed to become clear quickly, enabling both the investor and the entrepreneur to either fix the startup early or reinvest in a new idea.

*R. Rahmani*



R. Rahmani Ph.D.

Partner

[1] "Youth Unemployment in the MENA Region: Determinants and Challenges", International Monetary Fund, 2012

[2] "Youth Unemployment takes shine off of Africa's Economic Growth", The Guardian, 2012

[3] "Youth Population and Unemployment in the Middle East and North Africa", Population Reference Bureau, 2011

[4] "Promoting Youth Employment in Africa", African Economic Outlook, 2012

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## About G.G.A.

G.G.A. is a strategic consulting firm and the leading advisor on business strategy. We partner with clients from the private, public, and not-for-profit sectors in all regions to identify their highest-value opportunities, address their most critical challenges, and transform their enterprises. Our customized approach combines deep insight into the dynamics of companies and markets with close collaboration at all levels of the client organization. This ensures that our clients achieve sustainable competitive advantage, build more capable organizations, and secure lasting results. Founded in 2010, G.G.A. is a private company with locations in more than 20 countries. We seek to be agents of change—for our clients, our people, and society overall.