



Creative collaboration opens doors to innovation

RANIA ROSTOM, CHIEF INNOVATION OFFICER FOR GE IN MENAT, EXPLORES THE RELATIONSHIP BETWEEN CREATIVITY AND INNOVATION, AND HOW COLLABORATION CAN FAST-TRACK THE GROWTH OF SMES AND THE FULFILMENT OF NEEDS

Every creative venture is not necessarily innovative but every innovation is without doubt seeded by a creative spark, a thought, a need, a call to action to do things better.

And I am of the strong belief that scarcity (or in other words 'need') breeds creativity. As we span the region, we must address together those needs - the widening energy deficit, shortage of drinking water, inadequate healthcare standards and chocked up urban mobility.

Yet the region's biggest challenge is to create jobs for an increasing population of youth. But that's also the region's biggest resource, a rich demographic youth dividend of 200 million that continues to be untapped, simply because the resources needed to mobilise

their talent and channel them to the stream of productivity are lacking.

Enabling this potential and the youth's inventiveness can lead to positive, impactful and tangible change.

The capacity to innovate new technologies, however, does not happen in isolation. It needs catalysts by way of governmental encouragement, private sector technology sharing, academic partnerships and the potential to incubate new ideas into actionable end-results.

I like to think of our regional Innovation Centers as 'Industrial Incubators' - a space for multiple actors to work together, share knowledge, collaborate, and co-create, promoting localised solutions to regional challenges. In doing so, they contribute towards building the region's collaborative innovation ecosystem,

support the shift to manufacturing and knowledge-based economies, fast-track the growth of SMEs and entrepreneurship, and develop the local talent pipeline.

Technology leaps are changing the way we work more than ever before - in a good way. At GE, we discuss three disruptive forces of innovation - the Industrial Internet, Advanced Manufacturing and the Global Brain - what we collectively call the Future of Work. We see the Future of Work as a technological revolution that is going to redefine speed and collaboration - and that's the opportunity that this region must leverage.

From industrial parks to office towers and everywhere in between - we will soon begin to use terms like 'collaborative innovation', 'micro-factories', and 'cloud sourcing'.

The industrial Internet is

about meshing the physical and digital worlds through sensors and big data. Think sensors and big data telling you that a critical factory part will fail – not that it has failed.

Advanced manufacturing is about the emergence of new and less-expensive design and production techniques and new materials that are ‘democratising’ manufacturing. Think 3D printing, injection molding and the ‘Maker Movement’, - a new era of individual craftsmen and micro-factories.

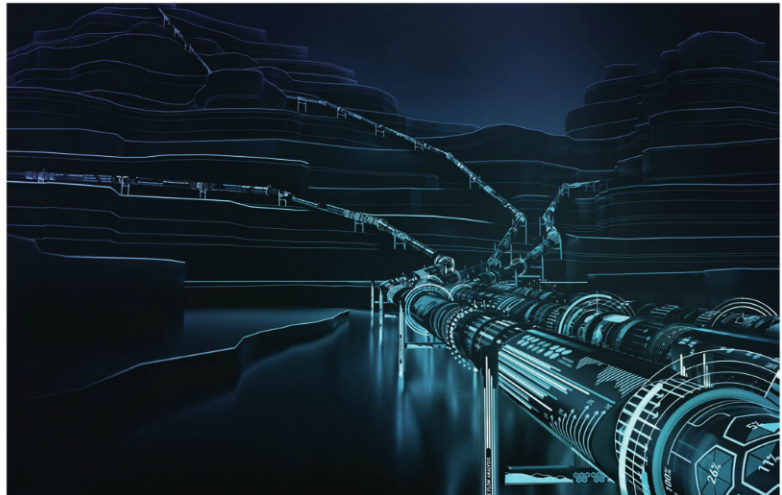
And, the global brain is about the collective intelligence of human beings across the globe being integrated through digital communication networks. Think open innovation challenges where an engineer working in Egypt provides a product design solution to a manufacturing problem in Saudi Arabia.

One way we are harnessing the power of the collective is through GE Garages - an open call for innovation that brings together people from all walks of life – from start-up to researchers - to explore Advanced Manufacturing techniques. Across the world, GE Garages inspires young minds and challenges them to venture into innovative pursuits such as designing jet engine parts and complex healthcare components with 3D printing techniques.

In Algeria, we launched IDEA (Industrie et Développement de l'Entreprenariat en Algérie) – a path-breaking entrepreneurship and innovation initiative to find suppliers for a new production facility that will produce more than 2 gigawatts (GW) of power generation equipment a year.

The initiative, launched by GE and Sonelgaz, will build a domestic supply chain, develop local human capital and create jobs. The program attracted 1000+ students and entrepreneurs to experience GE Garages and submit ideas through an open innovation challenge.

Creating such dynamic platforms to promote innovation is imperative to building a vibrant talent ecosystem and entrepreneurial culture among youth in the region.



▲ Rania Rostom, CIO at GE MENAT.

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By offering training in concepts of advanced manufacturing and localised prototyping, as well as enabling the start-ups to work on these emerging technologies, GE Garages helps realise their start-up ideas.

Then, through their focus on localised innovation, they become part of a larger supply chain that drives the manufacturing sector,

and, in turn, boosts economic competitiveness and exports.

This co-creation and collaborative model of innovation brings together the dynamism of start-up initiatives with the experience of established industries to look at a better and more efficient way of doing things.

The ideas co-generated will help achieve quantum jumps in productivity that is indeed the need of the hour – be it in the energy, healthcare, aviation or transportation sector.

Simultaneously, it builds an entrepreneurial environment that supports job creation through an efficient model of government-private sector-academia linkage.

The government acts as the facilitator, the private sector serves as the hardware, software and technology partner and the academia brings in cutting edge research competencies and new ideation.

Our holistic outreach to promoting innovation underlines the fact that collaboration is replacing go-it-alone strategies - creative collaboration is the way forward to inclusive and sustainable growth. Together, we can build a stronger culture of innovation as well as help address the world's most challenging problems. 

Rania Rostom is the Chief Innovation Officer for GE in the Middle East, North Africa & Turkey and is the co-author of "Mapping the Future of Work in MENAT."