ENVISIONING TOMORROW:

EXPLORING THE PETROLEUM SECTOR'S DIGITAL FUTURE



nder the patronage of Minister of Petroleum and Mineral Resources Tarek El Molla, Egypt Oil & Gas organized the "Future of Digital Evolution in Oil & Gas Industry" event in Dusit Thani LakeView Cairo Hotel on January 15th.

During their welcome speeches, Mohamed Fouad, CEO and Founder of Egypt Oil & Gas, and David Chi, Egypt Oil & Gas Committee Chairman and the Vice President of Apache Corporation and Country Manager for Apache in Egypt, expressed their thoughts on the importance of digital transformation. "Our leader within our sector through the Modernization program created room for everyone to integrate, not to compete. And I think this is what digital transformation needs," Fouad said.

Chi indicated that "One of the biggest challenges we all know is to practically produce energy in a more reliable, affordable, and responsible manner, and I think digitalization is a key enabler."

Meanwhile, El Molla expressed his confidence in the Egyptian oil and gas sector's ability to achieve digital transformation. "I am confident of the Egyptian oil and gas sector's ability to go on the digitalization journey, deploying the latest, cutting-edge technologies and applications in order to sustain the sector's four values of safety, innovation, transparency, and efficiency," El Molla stated during his opening speech. "I believe that the future will always be promising as long as we continue to engage, go through all sectors, renovate, and develop solutions for a successful industry," the minister noted.

The event featured a Strategic Roundtable that brought together the oil and gas sector's distinguished minds to discuss one of the most important aspects of the industry's future; digital transformation.

During the roundtable, the distinguished leaders discussed the nature of digital transformation in the oil and gas sector. "Digital transformation may seem to be just about deploying new technologies and optimizing processes of a new system, but in fact, digital transformation is going through all, as it requires fundamental integration of technologies into all areas of the business," El Molla said.

Sameh Sabry, Senior Vice President, Managing Director at Wintershall Dea Egypt, agreed, pointing out that "Digital transformation is not just for luxury; it is not just digitization. IOCs are sitting on massive amounts of data but mostly in silos. Digital solutions can use this data to create value, increase efficiency, and save costs and time."

Accordingly, digital transformation is about enabling process transformation to play a key role in enhancing the sustainability of business operations. "The whole idea behind process transformation is that it allows you to benchmark the your processes against the industry best practice," Hoda Mansour, Head of Business Process Intelligence-Southern Europe, Middle East and Africa, at SAP stated.

Digital transformation is also about the data, and managing these data. "The real edge of digitalization and digital transformation (is not just) to have the data but to use the data (and) transform it into a solution," Sherif Bayoumy, Director at SLB Egypt and East Mediterranean, noted.



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In the strategic roundtable, oil and gas leaders discussed the role of digitalization in creating a sustainable E&P sector, enhancing the digital transformation's role in crisis management, accelerating decision making, and its long-term effects on operational efficiency and the return on investment (ROI). The discussion also shed light on the role of digitalization in the oil and gas sector in the light of energy transition.

"For sectors like the energy sector, without digital transformation, you will lose opportunities for sustainability and you will lose opportunities to have better processes and reduce carbon emissions," Mohamed Abdel Aziz, Chairman & CEO of Enppi, said.

Moreover, Osama Salem, Business Development, General Manager, Enppi explained that "the benefit of the EOG Digitalization Taskforce is to listen to the technology providers and understand their plans and their business. We need to understand and know about their technologies. their innovations, and how (they could) fit in our system."

Industry leaders further highlighted the importance of digitalization in creating

opportunities in the energy sector. "The oil and gas sector will have to rely on data and digital platforms to generate new insights and other unearth new opportunities. Companies need to be closer to the citizens and offer their services in a modern, yet more cost-efficient way, and explore the transformational potential of digitalization to help create a highly interconnected energy system," Tarek Heiba, Senior Director and General Manager at Dell Technologies stated.

The roundtable also tackled the digitalization challenges facing the Egyptian oil and gas sector. "The challenge that we all will face with digital transformation is actually cyber security. So, cyber security is really important in several businesses," Tameer Nasser, Manager Egypt & Sudan at Baker Hughes, said. Moreover, Kristian Svendsen, Country Manager-Egypt (Upstream) at Chevron stated "I think we all find that sometimes data gets stuck internally, even in silos. We work really hard to create digital solutions where we can connect data sets together and make it available."

Furthermore, the roundtable guests talked about the digital transformation journey and what has been done on the road so far. "From the beginning, we chose to work with the most sophisticated software globally. We were selective

































about the type of software that should be used in the sector because we wanted digital solutions that cater the most to the needs of our industry." Alaa Hagar, Under Secretary for Minister's Technical Office, at The Ministry of Petroleum and Mineral Resources stated.

Additionally, the sector paid attention to developing future generations to empower them in the digital transformation arena. "We have already established the ICT academy with the most of universities here in Egypt. We have today 79 ICT academies built together with university students. These students will graduate with technology degrees funded by us and will contribute to the oil and gas sector," Hao Wang, CTO of Energy, North Africa Region at Huawei stated.

In order to achieve its digital transformation goals, the Egyptian oil and gas sector should pay attention to efficient decision making. "By assigning the right information to the right place, we can make the right decisions in terms of how to do a lot of deals and how to introduce them in a more efficient manner," Chi explained.

Infrastructure is also one of the factors required for successful digital transformation. However,

establishing the infrastructure is not a problem for the oil and gas sector. "Building the infrastructure for digitalization can be much faster [and] easier than building the physical infrastructure," Saed Habash, Regional Channel Director MEA at TeamViewer explained.

During the roundtable, several companies talked about their support in the digital transformation journey. "Digital transformation is Halliburton's core pillar towards achieving the ministry's strategy in supporting decision-making process and crisis management, especially in the field of drillingoperations digital transformation where massive efficiencies can be obtained," said Ahmed Helmy, MBA, Halliburton VP North Africa.

Meanwhile, Tamer Ahmed Abul Azm, Managing Partner, IBM Consulting, Egypt stated that "IBM offers deep industry expertise powered by the hybrid cloud, AI, and consulting services to accelerate business transformation for our clients in the O&G industry. We are committed to helping chemical & petroleum organizations to unlock their data potential and rethink their businesses to accelerate their energy transition, drive sustainable change and re-invent how business gets done."





TECHNICAL WORKSHOP

The event's technical sessions also witnessed nine presentations explaining how digital transformation has the potential to create revolutionary reforms within the petroleum sector by enabling it to realize its full potential.

Tackling digitalization and the positive social impacts that it will have on both communities and the energy sector, Ossama Maguid from Yokogawa Egypt/ AF1 Countries Manager delivered a presentation titled "Energy & Sustainability for a Better Society", which focused on how digitalization can further enhance sustainability while having a positive influence on communities. Adding to that point, Adel El Ansary, Senior Pre-sales Manager of Egypt, Libya & Levant at Dell Technologies also tackled the importance of using

innovative solutions to enhance the industry.

One such innovation was the Egypt Upstream Gateway (EUG). With the EUG being not only a major accomplishment but a trendsetter, Aser Abdelaziz, EUG Sales Lead, gave the audience an informative presentation about the FUG platform and its impact in attracting investments to the upstream sector from around the world.

Addressing digitalization from a slightly different angle, cybersecurity was what Iman Wafy, EGPC Chairman Assistant for Information Technology and Telecommunications, chose to focus her presentation on. Shed highlighted that though digitalization has always been a positive trend, in order for its impact to be meaningful, it also has to be secured and protected from attacks, especially when protecting assets that are as valuable as data

Data has always been an important part of how the energy sector does business. especially with the sophisticated cloud solutions that are now available in today's market. This was a point of interest for Michael Shafik, Director, Solutions & Ecosystem Development, Cloud Business Group, Northern Africa Region - Huawei in an engaging presentation titled "Lighting the Future Community Cloud". The cloud was also a theme that revolved around Mohammad Al-Jallad's presentation as the CTO & Director - UK Ireland Middle Fast & Africa of Hewlett Packard Enterprise. He specifically focused on HPE edge to cloud during his presentation.

Yet data can also enable workers to experience the reality of the workplace with the use of digital tools. With virtual reality becoming a major force within the industry, TeamViewer's Regional Channel Director MEA Saed Habash chose to address this subject in his presentation titled "Industrial Metaverse", which discussed how virtual reality can help in both enhancing operational efficiency and aiding onsite workers in performing their tasks in a safer and more productive manner.

Moving to discuss key digitalization enablers, Dawlat Hashem, Assistant Chairman for Communications & Information Technology, at Egyptian Natural Gas Holding Company (EGAS), chose to focus her presentation on the role and importance of ERP in digitalizing the oil and gas value chain. ERP was also the key focus of the presentation titled "What is the Path to ERP Implementation Success?" by Ahmed Ghassan the CEO Deputy Assistant for Planning and Projects at the ERP Projects Management Office at EGPC.













