

## **IBM Is Reinventing Itself, And Blockchain Is The Key**

**IBM's Middle East and Africa head Takreem El-Tohamy is steering the firm to focus on emerging technologies such as blockchain and artificial intelligence. Demand is rising thanks to clients such as Dubai's government—which expects that blockchain could help save \$1.5 billion annually.**

With help from IBM, blockchain is getting a boost in the Gulf. In October, Dubai's government announced a partnership with the U.S. tech company to launch the Dubai Blockchain Platform, which will bring together the public sector's electronic services in a shared digital ledger. The first application will reconcile and settle payments between government agencies and financial institutions. It will record those transactions in real-time, where previously it took 45 days.

The project is a local snapshot of the growing global interest in blockchain, the revolutionary digital ledger technology that originally underpinned Bitcoin. From healthcare to finance, companies globally are exploring blockchain applications to potentially improve efficiency and transparency, among other things. And IBM, under the leadership of CEO Ginni Rometty, has made blockchain, along with artificial intelligence (AI) and other newer technologies, central to the company's reinvention. To be clear, blockchain is still in its infancy, and depending on the industry, adoption may take time.

In the Middle East, Dubai's leaders are keen to be early adopters. IBM is at the center of the action, serving as lead strategic partner to Smart Dubai, the government organization that is helping in the emirate's smart transformation —which includes leading the charge in developing projects such as the Dubai Blockchain Platform. "Very soon [blockchain] will be business as usual," says Takreem El-Tohamy, IBM's Dubai-based general manager for the Middle East and Africa and a 34-year company veteran.

Demand is on the rise. Market intelligence firm International Data Corporation (IDC) expects regional spending on blockchain solutions to nearly quadruple to \$307 million in three years, led by governments in the Gulf. AI-related software, hardware and business services will increase threefold from \$37.5 million in 2017 to \$114 million by 2021.

With national reform agendas underway in the U.A.E. and Saudi Arabia, there's an opportunity to pitch new technologies that could make public services more efficient. "When it comes to AI and blockchain, [IBM] has been working extensively with the public sector in the Middle East," says Megha Kumar, a research director covering the region for IDC.

One recent project has IBM collaborating with Dubai's Department of Economic

Development on a blockchain-based service that digitizes the process of issuing business licenses for government entities, free zones and the private sector. Announced in May 2018, the service is designed to improve the ease of doing business in Dubai and facilitate foreign direct investments.

Besides Dubai, the company signed an agreement recently with the Riyadh Municipality to explore blockchain applications to deliver public services. Beyond governments, El-Tohamy won't disclose which companies are using or testing IBM's technology. He says there's interest from financial services, shipping and retail companies, but projects are still in early stages.

Globally, hundreds of companies have adopted IBM blockchain, including Walmart, Nestlé and Dole. By next year, American retail giant Walmart expects its suppliers to use the digital ledger to track the distribution of lettuce from the time the produce leaves the farm, in order to quickly identify and respond to potential food safety issues, such as E. coli. Shipping giant Maersk and IBM created a blockchain platform to manage the movement of goods to reduce paperwork and fraud. Saudi Arabia's customs authority joined the platform, which is expected to operate by the end of the year.

Long known for mainframe computers, IBM has been investing heavily in cloud computing, analytics, artificial intelligence and blockchain. "We always say in IBM that data now is the most valuable natural resource," says El-Tohamy, who has also pushed IBM's AI platform Watson in the Middle East since 2015. That's when IBM forged a partnership with Abu Dhabi investment firm Mubadala, called Cognit, to bring Watson to the Middle East and teach it Arabic. "AI will allow you to get the maximum out of your data," says El-Tohamy.

Not surprisingly, Dubai's government was quick to adopt the technology. That's included the launch of "Rashid," a chatbot service powered by IBM's AI technology that answers questions in real-time about Dubai's business licensing and registration procedures. Regional companies in telecommunications, banking and insurance are also using the chatbots at their call centers. IBM's AI technology is also being used to run a physical service center in Dubai. The emirate recently launched the Services 1 center that will allow citizens and residents to complete the otherwise cumbersome and time-consuming procedures such as registering their newborn children or applying for a marriage certificate in one transaction.

IBM, which doesn't break out revenues for the Middle East, faces plenty of competition. Major technology companies, such as Oracle, Amazon and Google, are exploring or applying AI and blockchain, while cloud computing is already an essential part of the modern IT landscape.

Despite the fanfare surrounding blockchain in Dubai, IBM still relies on lucrative multi-year IT contracts with large companies. Earlier this year, it inked an \$85 million deal with Emirates to manage the airline's IT infrastructure with cloud technology for the next decade. The agreement expanded upon a \$300 million contract from two years ago. It follows a similar \$700 million deal with Etihad Airways. Globally, it is fortifying its cloud capabilities with its \$34 billion acquisition of Red Hat as it looks to get a lead in hybrid

cloud computing—a model that uses both on-premise and cloud computing to meet IT needs. IBM's global chief Rometty even went on to peg hybrid cloud as “an emerging \$1 trillion market” in a call with analysts following the deal. Although the Middle East has in the past harbored doubts about cloud adoption, the appetite for such solutions is on the rise, making the market ripe for adoption of hybrid cloud. Abu Dhabi's Mubadala recently inked a deal with Injazat Data Systems to build a hybrid cloud platform for its businesses. Research firm Gartner estimates that companies in the Middle East and North Africa will spend close to \$2 billion on public cloud services by 2020.

El-Tohamy has steered IBM in the Middle East since 2005. He got his start with the company after studying engineering at the American University in Cairo. There he took courses in business management, where IBM was a topic of discussion. That spurred his interest in the tech giant.

Upon graduation, he joined the company in Cairo in 1984—coinciding with the PC revolution, which upended IBM's business and was the beginning of a long transformation. IBM embraced cloud technology in 2007, leading it to open data centers around the world and invest billions in acquisitions.

As regional head, El-Tohamy expanded operations. He opened centers in Egypt, Morocco, Saudi Arabia and the U.A.E. to support clients with application development and services. IBM also opened research facilities in Kenya and South Africa, as well as design studios in Dubai and Istanbul.

Interest in blockchain became official in 2016. That year, Dubai announced the creation of its blockchain strategy to manage government documents by 2020, which could result in \$1.5 billion in annual savings. “Our partnership with IBM on launching the Dubai Blockchain Platform will help make blockchain technology increasingly significant in governments' and organizations' day-to-day activities,” said Wesam Lootah, Smart Dubai's CEO, in a statement to *Forbes Middle East*.

Dubai also launched the Global Blockchain Council to explore applications. In addition to IBM, members include Microsoft, SAP, Cisco, Du, Emirates NBD and Careem. “To become mainstream there needs to be properly defined use cases across sectors, access to skills and technologies,” says IDC's Kumar.

With solutions such as blockchain and AI on track to grow quickly in the tech-hungry Middle East, El-Tohamy is keeping an eye on technology that could give Big Blue an edge in the region. In May 2018, he launched a new client center in Abu Dhabi that focuses on IBM's cloud, AI, blockchain, Internet of Things and analytics platforms—all the latest technologies that the company is betting big on in the Middle East. “This is what our clients want and need,” says El-Tohamy.

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