Innovating through tech in the GCC

Contents

About this research

Innovating through tech in the GCC is an Economist Intelligence Unit report, supported by the Bahrain Economic Development Board. The report examines how both local and international companies in the GCC are integrating advanced technologies to offer innovative products and services to the market.

This report combines extensive desk research, data analysis and insights from expert interviews. We conducted in-depth interviews with executives at small- and medium-sized enterprises as well as large, established companies. Interviewees explained the ways in which they are developing business solutions using advanced technologies such as artificial intelligence and blockchain. In addition, we interviewed industry experts for an overarching perspective of technology adoption in the region. The interviews were conducted in January and February 2020.

Our sincerest thanks go to the following participants (listed alphabetically) for their time and insights:

- Abdullah Asiri, CEO, Lucidya
- Yehia Badawy, co-founder, Rain
- Sahiqa Bennett, CEO and co-founder, Searchie
- Anthony Butler, CTO blockchain services, IBM
- Abhinav Chaudhary, co-founder and CEO of Fero.Ai
- Sean Dennis, CEO and co-founder, Seafood Souq
- Muhannad Ebwini, CEO, HyperPay
- Hussain Haji, co-founder and CEO, Inagrab
- Jad Hajj, partner, Strategy&
- Mustafa Hasan Marhama, co-founder, Inagrab – Dalooni
- Yusuf Sabadia, CEO, Averos
- Amjad Puliyali, founder, GetBaqala

Jessica Twentyman is the author of the report and Melanie Noronha is the editor.

Executive summary

Companies in the six states of the Gulf Cooperation Council (GCC) are increasingly looking to deploy innovative technologies that will help them build new business models and deliver modern customer experiences. This is imperative for the region's economies amid the coronavirus pandemic as well as in the context of their long-term ambitions to diversify away from oil and gas. Pandemic-related lockdowns and social distancing measures have increased the reliance on digital technologies—video conferencing for communicating with colleagues remotely, telehealth for remote diagnostics, digital banking for online payments and money transfers, e-commerce, among others. Wider adoption of advanced technologies can unleash a host of business opportunities across enterprise software solutions, financial services, consumer goods and retail, among others.

In this Economist Intelligence Unit report, we take a look at trends in technology deployment, the business opportunities emerging as a result and the hurdles companies continue to face as they integrate advanced technologies into core solutions.

Key findings of the report:

- Companies are increasingly incorporating innovative technologies into their core products and services, with artificial intelligence, the Internet of Things and blockchain topping the list of advanced technologies adopted.

- The growing young population in the region presents a significant opportunity for companies to provide the types of digital experiences that both consumers and future employees will increasingly expect and demand.

- Technology infrastructure challenges are melting away as more data centre space opens up in the region and telecoms operators scramble to introduce new 5G networks that will support more data-intensive products and services.

- Key challenges persist, including a regional digital skills shortage, a lack of economic integration between GCC member states that hampers regional expansion and increased competition from foreign multinationals with more experience in digital transformation. Companies must play an active role in educating clients on advanced technology solutions and use cases to drive greater adoption.

Introduction

In the drive for economic diversification, the minds of business leaders across sectors in the six states of the Gulf Cooperation Council (GCC)—Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates—are increasingly turning towards advanced digital technologies as a source of future growth. If successful, their efforts could help to tackle the region's most pressing challenge: its economic reliance on rapidly diminishing oil and gas reserves.

The economic challenges resulting from the coronavirus pandemic further reinforce the importance of economic diversification. The pandemic not only resulted in disruptions as lockdowns and social distancing measures were imposed but also a sharp fall in oil prices, triggered by a fall in global demand. Non-oil sectors have been impacted too. The petrochemicals sector has seen reduced demand from manufacturers. Tourism has stalled: According to the UN World Trade Organisation, international tourist arrivals in April contracted by 98% from the previous year in four GCC countries (Oman, Qatar, Saudi Arabia and the UAE). Saudi Arabia also banned international visitors from making the annual ten-day haj pilgrimage in July, which drew in about 1.8m foreign visitors in 2019. Consequently, The Economist Intelligence Unit forecasts that the GCC economies will shrink by more than 5% in 2020.

Yet amid this global health and economic crisis, digital transformation has accelerated. As employees were required to work from home, businesses employed video conferencing tools for collaboration. Hospitals have expanded offerings in telehealth, which was at a nascent stage in the GCC region at the start of 2020. With malls and stores shuttered, consumers have relied on e-commerce platforms for items from groceries to clothing, supported by digital payment platforms. Digital banking solutions are enabling critical financial transactions. Agile startups in the region hope to capitalise on this momentum.

Ripe for digital solutions

For many business leaders and entrepreneurs in the GCC, the aim is to build new business models and deliver improved customer experiences. They are doing this by incorporating into product and service offerings technologies such as the Internet of Things (IoT), artificial intelligence (AI), augmented and virtual reality (AR/VR), and blockchain.
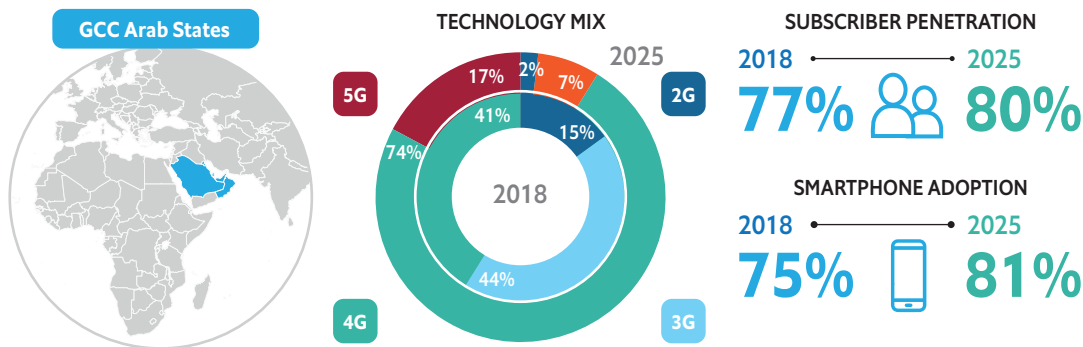
These new, digitally enhanced products and services—from e-commerce to financial services—seem likely to find favour with some of the world's most digitally "switched-on" audiences. Internet penetration stands at well over 90% across five of the six GCC states (in Oman, it stands at 80%), on a par with rates seen in Japan, the US and South Korea. This compares to a global internet penetration rate of around 57%.[1]

Likewise, smartphone users accounted for 75% of all mobile subscribers in the region in 2018, compared with 39% across other Arab states and 54% across the Middle East and North Africa (MENA) region as a whole, according to figures from global mobile operators' association GSMA.[2]

---

[1] "Internet Usage in the Middle East", *Internet World Stats*, June 30th 2019, https://www.internetworldstats.com/stats5.htm
[2] "The Mobile Economy: Middle East & North Africa", GSMA, 2019. https://www.gsmaintelligence.com/research/?file=87bc4fd841cb69e2fae9e313dcdcc45b&download

Figure 1: A digitally "switched-on" audience in the GCC

GCC Arab States

TECHNOLOGY MIX

2025

2018

17% 2% 7%
41% 15%
74%
44%

5G 2G 4G 3G

SUBSCRIBER PENETRATION

2018 → 2025
77% **80%**

SMARTPHONE ADOPTION

2018 → 2025
75% **81%**

Source: GSMA

By October 2019, the GSMA notes, ten mobile operators in the GCC region had already launched commercial 5G services. With its promise of faster speeds, lower latencies and the capacity to handle massive numbers of concurrent connections, 5G could play a huge role in supporting new data-intensive solutions.

**Early successes, but much work to do**

Some homegrown digital start-ups have already achieved considerable success in the region. A number have gone on to attract the attention of foreign investors. Most notably, the US$580m acquisition of e-commerce platform Souq.com by Amazon in 2017 and the US$3.1bn acquisition of ride-hailing app Careem by Uber in 2019 have boosted the GCC's reputation as an emerging hub for digital innovation and development.

However, there is much work still to do if the GCC region is to build on a handful of early, high-profile successes and achieve widespread

digital transformation. Governments have already set the stage with ambitious plans for building digital, knowledge-based societies. But such plans can only be successful with continued focus on the kind of legislative and regulatory modernisation that enables digital businesses to flourish. The good news is that reform of the business environment has been on a steady rise across the GCC economies in recent years, as the World Bank notes in its "Doing Business 2020" report.

The region's standout success has undoubtedly been the UAE, which has implemented a slew of measures to support a diversified economy and has served as a useful source of inspiration to its neighbours. Saudi Arabia, meanwhile, is the world's most improved economy in the World Bank's 2020 update, in terms of its "Ease of Doing Business" score, and both Bahrain and Kuwait also featured in the world's top-ten most improved economies in this respect.

Figure 2: World Bank's "Ease of Doing Business" score, 2016-2020

— UAE   — Bahrain   — KSA   — Oman   — Qatar   — Kuwait
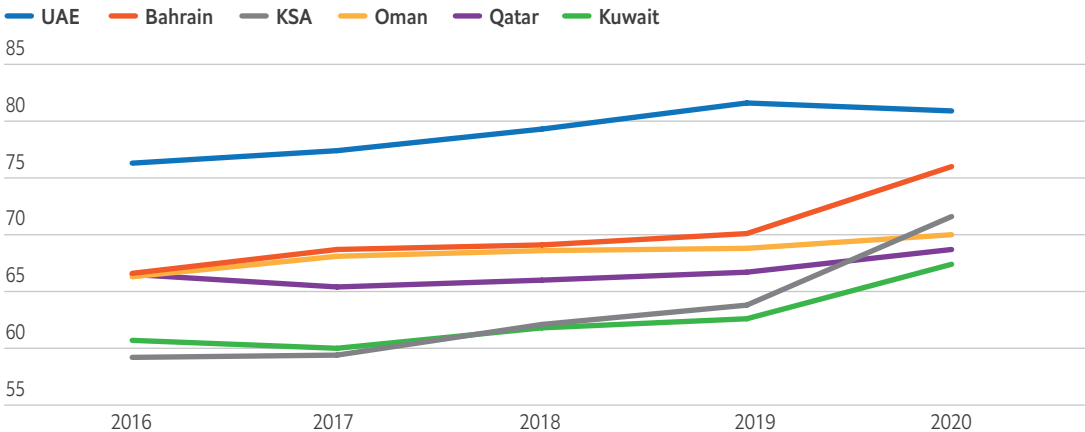
Source: World Bank Group

At the same time, startups and established businesses will need to attract workers with digital skills that are simultaneously in high demand and short supply in order to implement advanced technologies and deliver on their innovation goals. Here, the region must urgently tackle its domestic digital skills shortage.

In this report, we will explore how companies in the GCC are integrating advanced technologies into their core product or service offering. We will examine the factors enabling their new business models as well as the obstacles that stand in the way.

Chapter 1: Advanced technology pioneers

As with their counterparts around the world, GCC business leaders recognise digitalisation as an opportunity to become more efficient in their internal operations and decision-making. They see its potential as a powerful driver of revenue growth, not just by selling existing products and services through digital channels but by launching entirely new, digitally-enabled ones. Above all, they view digitalisation as a platform for the adoption of more advanced technologies that will underpin entirely new business models—ones that differentiate their offerings in the eyes of consumers.

> ## "
> ## Adoption is quite high now, but it's yet to trickle down to economic impact. It's not there yet, it's at a very early stage.
>
> *Jad Hajj, partner, Strategy&*

A study by IT market analyst firm Gartner finds signs of momentum.[3] In 2019 the company surveyed over 100 chief information officers (CIOs) from the GCC region who collectively represent US$7.8bn in IT spending. The study found that 30% of respondents were scaling and refining the results of their digital initiatives, an increase from 27% the year before. Spending on advanced technologies was on the increase too—IT budgets were expected to rise by almost 3% during 2019—and artificial intelligence was identified as the top "game-changing" technology for the year.

For businesses, the big question is how to capitalise on advanced technologies, including AI, blockchain and drones, says Jad Hajj, partner at strategy consultancy Strategy& (part of the PwC network) and leader of the firm's technology, media, telecommunications and digital practice in the Middle East. "Adoption is quite high now, but it's yet to trickle down to economic impact. It's not there yet, it's at a very early stage. There are lots of ideas but there is still much work to be done to really generate the desired impact."

Integration in key sectors

In order to better understand the trends among companies leading the charge, The Economist Intelligence Unit conducted analysis of almost 240 companies in the GCC region that have already incorporated advanced technologies into their core offerings.[4] The technologies with the highest rates of uptake are AI, IoT and blockchain, followed by advanced manufacturing and robotics, AR/VR and advanced biosciences (which includes biometrics).

In terms of industry, the information and communications technology (ICT) sector is unsurprisingly the most enthusiastic integrator of advanced technologies, offering companies blockchain, data mining and cloud

---

[3] "Gartner Survey Finds 30 Percent of GCC CIOs Are Scaling and Refining Their Digital Initiatives", *Gartner*, March 6th 2019. https://www.gartner.com/en/newsroom/press-releases/2019-03-06-gartner-survey-finds-30-percent-of-gcc-cios-are-scali
[4] The Economist Intelligence Unit analysed third-party data from Crunchbase, a business information platform. We identified 237 companies that were using advanced technologies based on a search for keywords in the description of their business category. The keywords included multiple terms representing the following advanced technologies: Artificial intelligence, augmented reality/virtual reality, internet of things, advanced manufacturing and robotics, blockchain, energy storage, computer vision, quantum computing, nanotechnology, advanced biosciences, cloud computing.

computing solutions, among others. Advanced technologies have also been widely integrated into core products and services in consumer goods and retail, financial services , and media and entertainment, with many developing consumer-focused applications.

The demographics of the region support this: of its approximately 58m people, close to half are under the age of 30.[5] As digital natives,

they are working, learning and shopping online. To engage this youthful consumer base, companies are left with no choice but to create and deploy products and services through digital channels. Already, customer experience (CX) is seen as a pressing concern by GCC business leaders. A recent YouGov survey of more than 300 IT decision-makers in the region reveals that 80% view CX as "very important" in terms of 2020 priorities.[6]

Figure 3: Advanced technology integration in core offering by sector
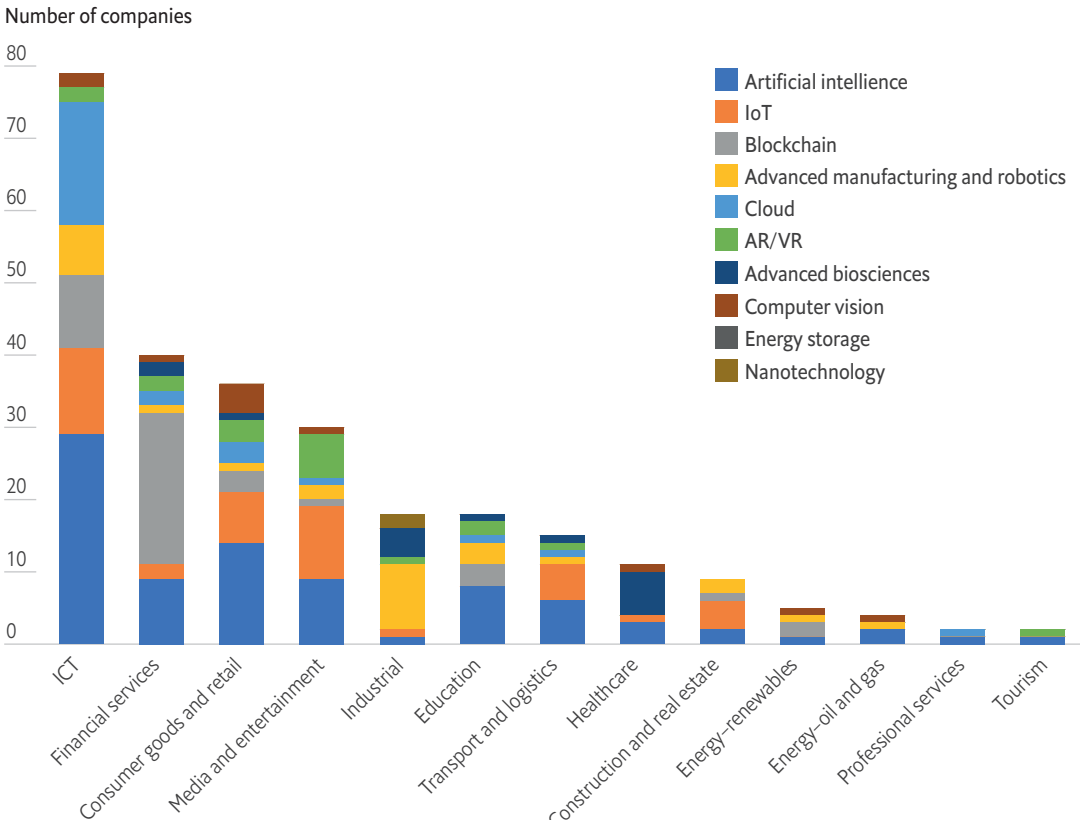
Number of companies

Source: Crunchbase

To better understand how homegrown companies as well as multinationals are integrating advanced technologies into their core solutions, the latter half of this chapter delves deeper into use cases for three advanced technologies: AI, IoT and blockchain.

Powering up: Artificial intelligence

AI adoption is highest in the ICT sector, where it is an essential part of many companies' offerings to customers. AI powers tech companies' search and recommendation engines; it is used to efficiently manage the vast estates of IT infrastructure provided to cloud-computing customers; and it is bundled into tools and services for a whole range of analytic applications, including fraud detection, voice recognition and cybersecurity.

In the GCC, a host of companies are offering similar solutions. In the UAE, Searchie offers a talent acquisition software which uses AI to screen and shortlist candidates based on a video interview. During the pandemic, Searchie adapted its software to assist with screening patients. Lucidya, a Saudi-based company offering an AI-powered social media analytics tool, supplies ad agencies with vital insight into consumer behaviour and preferences.

Meanwhile at HyperPay, a payment gateway provider, AI and machine learning are vital tools to maintain the integrity of payments (that pass between e-commerce customers and online merchants) and detect fraudulent transactions. "While the growth opportunity with online payments is considerable, we also know that merchants need to protect their revenues and secure their transactions, as well as be responsive to the evolving threat of fraud," says HyperPay's CEO and co-founder Muhannad Ebwini. AI and machine learning, he says, are used by the company to apply business rules set by their fraud and risk team and spot anomalies that might indicate problem payments. "Because this technology [is "learning" everyday] by monitoring millions of transactions, we increasingly know the exact behaviour of fraudulent activities and can stop them immediately."

Because this technology is "learning" everyday by monitoring millions of transactions, we increasingly know the exact behaviour of fraudulent activities and can stop them immediately.

Muhannad Ebwini,
CEO and co-founder, HyperPay

Figure 4: Examples of companies offering AI-based solutions in the GCC

Searchie: AI-powered talent acquisition platform

Lucidya: AI social media analytics tool

HyperPay: Fraud detection in payment services using AI

Inagrab: Identifying optimal sales strategies

Source: The Economist Intelligence Unit

AI is being integrated in consumer goods and retail too. It is used to streamline customer journeys and personalise their experiences, predict demand for specific products based on wider consumer trends and increase the efficiency of delivery supply chains. Inagrab Inc, a technology company, provides data analysis services powered by AI in Bahrain through its local platform Dalooni. It offers SMEs recommendations "in plain text for regular human beings to understand where to promote their products internationally," explains co-founder and CEO Hussain Haji. "After providing those recommendations, businesses can list their products on the platform and Dalooni will link them to independent sales agents, who will promote the products through social media or other common communication channels.

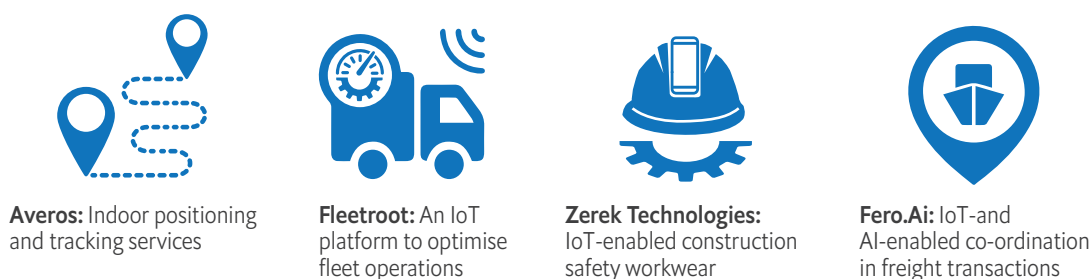### Staying connected: Internet of Things

From smart homes and factories to connected vehicles navigating smart cities, the term "IoT" describes interconnected devices and machines equipped with sensors that can report on their usage and environment and receive instructions remotely.

Again, the ICT industry is the frontrunner among advanced technology pioneers in the GCC. Many technology companies now offer IoT platforms where companies can collect data streaming from their devices and machines and access the tools they need to interrogate and interpret that data and turn it into actionable business insights.

One example is Saudi-based Averos, a company offering indoor positioning and tracking services using IoT-connected devices. Its solution has been integrated into the Riyadh International Airport app to help passengers locate their gates. Hospitals across Saudi Arabia and the UAE are also using its IoT solution to track expensive machinery and equipment. Similarly, Société Générale de Surveillance supplied IoT-connected devices to screen containers and trucks at Khalifa Bin Salman Port in Bahrain, allowing customs authorities to process 120 trucks per hour, up from 20 trucks an hour before these systems were installed.

The use cases are clear, but to accelerate IoT adoption in the GCC a company's intermediaries (the system integrators) must

Figure 5: Examples of companies offering IoT solutions in the GCC

Averos: Indoor positioning and tracking services

Fleetroot: An IoT platform to optimise fleet operations

Zerek Technologies: IoT-enabled construction safety workwear

Fero.Ai: IoT-and AI-enabled co-ordination in freight transactions

Source: The Economist Intelligence Unit

be educated on IoT solutions. Yusuf Sabadia, CEO of IoT technology company Averos, explains that his business "goes through partners and sometimes we have maybe two or three layers between us and the end-consumer," so intermediaries play a critical role in driving adoption of IoT solutions in the market. In the GCC there are hubs, such as Brinc Baletco in Bahrain and Intel's Innovation Center in the UAE, dedicated to addressing challenges and accelerating the growth of IoT companies, and startups in particular.

The media and entertainment sector also makes extensive use of IoT. The data that flows from smart TVs, gaming consoles and the like offer rich insights into audience engagement and behaviour. This provides content creators with opportunities to grab more "eyeball" time through personalised recommendations.

It's important to note, however, that while IoT may not currently form part of a company's core offering, its adoption in businesses across sectors is only expected to grow. Over one

third (34%) of Middle East respondents to the Vodafone IoT Barometer 2019 (over 1,000 IT experts in total) said that their companies have already adopted IoT, in line with the global average.[7] A further 32% say they have plans to do so within the next two years. But generally, companies are using IoT to achieve internal goals around better use of assets and the minimisation of operating costs. In the industrial and energy sectors, the report notes "significant uptake" of IoT for plant-based monitoring, ensuring that factory-floor machinery runs efficiently and ensuring the safety of workers. Our analysis reveals that the industrial sector shows the greatest uptake of advanced manufacturing and robotics technologies, which often includes IoT technologies.

Building on blockchain

It's in the financial services sector that the highest rates of blockchain adoption are seen, unsurprising given the technology's roots as the underlying mechanism for the Bitcoin cryptocurrency. But in a trend that can be

---

[7] Vodafone IoT Barometer 2019 https://www.vodafone.com/business/news-and-insights/white-paper/vodafone-iot-barometer-2019
[8] "BLOCKCHAIN: Opportunities for Private Enterprises in Emerging Markets", *International Finance Corporation, World Bank Group*, January 2019. http://documents.worldbank.org/curated/en/260121548673898731/pdf/134063-WP-121278-2nd-edition-IFC-EMCompass-Blockchain-Report-PUBLIC.pdf

Figure 6: Examples of companies offering blockchain solutions in the GCC

Seafood Souq: Blockchain-based seafood supply chain traceability platform

Rain: A cryptocurrency exchange

BlockGemini: Enterprise blockchain solutions

Source: The Economist Intelligence Unit

observed globally, it has come to be seen by companies across the wider financial services sector as the future of transaction processing.[8] Proponents argue that blockchain technology could support faster and more cost-effective alternatives to the traditional clearing and settlement mechanisms on which financial services companies rely.

In 2017, for example, Al Rajhi Bank of Saudi Arabia announced it had completed a secure, cross-border money transfer between its Riyadh headquarters and one of its offices in Jordan using US-based technology company Ripple Lab's blockchain system. The following year, Abu Dhabi's Al Hilal Bank used blockchain to sell a portion of its US$500m sukuk (a Sharia-compliant financial instrument similar to bonds). More recently in January 2020, Qatar's Commercial Bank announced its participation in the first blockchain-based, open-account trade finance trial on the Marco Polo platform (founded by two start-ups, US-based R3 and Ireland-based TradeIX).

Rain, based in Bahrain, has stuck closer to blockchain's roots to become the first Sharia-compliant cryptocurrency exchange. The exchange acquired a license to operate in mid-2019 from the Central Bank of Bahrain following its completion of the bank's regulatory sandbox programme. "But there's still some way to go for blockchain technology to be properly understood in the region," Mr Badawy says. As the first licensed cryptocurrency exchange, Rain will need to play a role in that education process through its relationships with established banking partners and payment processors.

Beyond the financial services industry, there are examples of adoption across the GCC in trade and logistics and enterprise software solutions. UAE-based Seafood Souq is developing a blockchain-based seafood traceability platform. Its aim is to streamline the supply chain by linking regional buyers directly with regional and international suppliers. "The difficulty with implementing supply chain traceability on blockchain is that you've got to get fairly large players to contribute data," says Sean Dennis, its CEO and co-founder. This is particularly challenging in the fisheries sector that has seen little

to no innovation for decades. Similarly for trade and logistics, getting a large number of players to buy into the system continues to be challenging. Often it involves bringing together competitors or players who are not used to working with each other. "Blockchain is a team sport, right?" quips Anthony Butler, chief technology officer for blockchain services at enterprise software provider IBM.

Mr Butler believes there will be stronger growth in the region for private blockchain (where user access is restricted) instead of a public blockchain (where anyone can access the information). Use of blockchain by government entities is also encouraging adoption in the private sector.

Overall, business leaders are confident that there is a place for blockchain-based solutions in the market. "Where there is a need for trust,

"

Where there is a need for trust, there is a need for blockchain or a distributed ledger. When you have multiple players along a supply chain it's impossible for an individual player to see what is going on.

Sean Dennis, CEO and co-founder, Seafood Souq

there is a need for blockchain or a distributed ledger," says Mr Dennis. "When you have multiple players along a supply chain it's impossible for an individual player to see what is going on. Transparency is therefore one of our core pillars."

Chapter 2: Unlocking opportunities for growth

Despite the interest and enthusiasm of executives in the GCC, progress with digital delivery at a large scale and experimentation with advanced technologies has lagged behind other regions of the world according to a 2019 report from management consultancy McKinsey. "Some companies have tested the waters, while others have moved more aggressively but haven't scaled their programmes. Many companies, however, are still sitting on the sidelines, wondering how to move from strategy to action," say the report's authors. "Regardless of where a company stands now, Gulf executives need to act quickly to move their organisations to the next level."[9]

There are many impediments facing executives, the most pressing of which is the digital skills shortage. In addition, to accelerate integration of advanced technologies and the development of data-based products and services, the region's digital infrastructure needs strengthening beyond what progress has already been made. Further economic integration within the GCC could enable business expansion into other markets in the region. In this chapter, we discuss the challenges and opportunities ahead.

Addressing skills shortages

"There's little doubt that [the digital skills shortage] is one of the biggest challenges," says Mr Hajj of Strategy&, a sentiment which was expressed by almost all our executive interviewees. A 2017 Strategy& report estimates that by 2025 the GCC states will have created approximately 1.3m new digital jobs (700,000 of them in Saudi Arabia alone).[10] Importing talent is easier in markets such as

1.3m

New digital jobs to be created in the GCC between 2017 and 2025, according to Strategy & interviewees.

---

[9] D Karam, C Kunz, J Patel et al., "How Gulf companies can overcome the five biggest challenges to their digital transformation", McKinsey, May 2019. https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/how-gulf-companies-can-overcome-the-five-biggest-challenges-to-their-digital-transformation
[10] S Boshali, S Papazian, M Rizk et al., "Empowering the GCC digital workforce: Building adaptable skills in the digital era", *Strategy&*, 2017. https://www.strategyand.pwc.com/m1/en/reports/empowering-the-gcc-digital-workforce-full-report.pdf

the UAE, Qatar and Kuwait, which have large expatriate populations, but harder in countries with larger local populations such as Saudi Arabia and Oman. "Governments are aware of the problem and there's a lot of focus on this [in terms of encouraging science, technology, engineering and mathematics (STEM) education], but this is still one of the most difficult challenges and it's one that's going to take time [to resolve]," Mr Hajj explains.

Until then, the onus lies with companies to invest in the professional development of employees and to ensure that they are not lured away to other skills-strapped businesses. "With fintech being an emerging industry in the region, it has been challenging to find experienced engineers who are ready and equipped for the work required," says Mr Ebwini of HyperPay. "That's where our training and development programmes come in, to empower new engineers with new skills."

At his company, the practice is now to take young engineers, fresh from university or with a few years' experience, and spend six months training them intensively before they are set to work on the company's technology. "But after investing in new talent and equipping

them with the skills needed, we focus quickly on taking positive steps to help improve employee satisfaction and retention within the company," he says. Offering share options with the condition to stay at the company for three years has proved a successful way of keeping staff turnover low and good engineers on-side.

Reputationally positioning firms as exciting places to work will be important to attract the future workforce. "For potential recruits, being able to work on a cutting-edge technology like blockchain, underpinning an application that is actually working, is something that definitely holds some weight," says Mr Badawy of Rain.

Strengthening digital infrastructure

In 2016 when Amjad Puliyali launched GetBaqala, an online grocery service in Bahrain, he knew from the start that the company's mobile-first, data-driven model would require the huge processing power and storage that only a hyperscale cloud provider could offer. In response to this demand, a number of data centres have been set up across the GCC—by international companies such as Microsoft, Amazon and Alibaba as well as local players such as Khazna. What

> **For potential recruits, being able to work on a cutting-edge technology like blockchain, underpinning an application that is actually working, is something that definitely holds some weight**

Yehia Badawy,
co-founder, Rain

it equates to for businesses in the region is more available capacity, more choice and the option to store data in-country—previously a significant inhibitor to the realisation of digital ambitions.

In terms of connectivity, the launch of 4G in the GCC region did much to bring more of its people online and spur impressive growth of online services such as ride-hailing apps (as seen with Careem) and e-commerce sites (such as Souq.com). The introduction of 5G over the next few years could be even more profound in its impact.

A report from UK-based consulting and research firm Analysys Mason, for example, estimates that 5G could generate revenues of US$273bn over ten years for companies in the GCC.[11] "It's still in early stages and the actual use cases are yet to be developed," says Mr Hajj of Strategy&. "But the ones that we believe are going to be prominent include anything that requires near-instantaneous [data transfers]." Applications could range from AR/VR entertainment for consumers to industrial IoT and drones for enterprises.

Economic integration, geographic expansion

At the same time, many businesses are looking at regional expansion in recognition of the fact that their relatively small home markets are unlikely to support their growth ambitions for the long term—with the possible exception of those based in Saudi Arabia, by far the largest GCC market. Increased competition from foreign multinationals is also a factor here as these companies become more adept at overcoming entry barriers to the region and local governments push through

measures that make it easier for them to do so. Talent acquisition platform Searchie faces stiff competition from international players and is differentiating by offering more local customisations (Searchie has an Arabic-speaking avatar). But wider market access is key.

Yet this can be challenging in the current environment, says Mr Puliyali of GetBaqala. "It's still hard work to deal with the different regulations, different visa rules, different legislative systems and different financing options across the GCC. It's not a one-access market." He also points to considerable differences in sizes of expatriate communities, dialect among Arabic speakers and customer behaviour from state to state. This means that initially attractive new target audiences can sometimes prove unpredictable in their responses.

A great deal more work is needed to achieve economic integration in the region. Progress has been slow in this regard and, since it depends on political goodwill between members, seriously hampered in the past two years by the boycott of Qatar by some GCC states.

Economic integration featured high on the agenda at the 40th session of the GCC Supreme Council, held in Riyadh in December 2019. The final statement from the summit highlights the need to accelerate completion of various studies, projects, legislative steps and decisions relating to the customs union, the common market and financial/monetary integration in order to achieve economic unity by the 2025 goal. Harmonising legislation and policies will be the cornerstone to facilitating business expansion within the region.

---

[11] C Gabriel, S Bokun, H-A Lacour et al., Unlocking Digital Opportunities with 5G: A GCC Outlook", *Analysis Mason*, October 2018. https://www-file.huawei.com/-/media/CORPORATE/PDF/white%20paper/2018/analysys-mason-5g-opportunities-in-the-gcc-region.pdf?la=en-GB

Conclusion

Although the coronavirus pandemic has brought economic activity in many sectors to a halt, it has provided fertile ground for digital businesses. The pandemic has changed perceptions of digital solutions—from remote working to online banking—thereby accelerating digital transformation across sectors. Widespread diversification, a fast-evolving technology landscape and socio-economic developments all point to a vast opportunity ahead for GCC companies that successfully invest in digital technologies.

But there is still much work to be done. In particular, the region will require human capital development focused on educational and professional training to provide the necessary digital skills upgrade. This will be vital for workers to participate in a knowledge-intensive, non-oil economy.

Businesses need to develop a laser-like focus on customer experience in a region where younger consumers will increasingly demand more modern, streamlined digital services. This is also required for local companies to face foreign competitors with longer track records of delivering digital products and services. Companies providing advanced solutions must play a role in educating their clients on technologies and use cases. They need to facilitate a mindset shift and encourage a willingness to experiment. In established businesses, says Mr Hajj from Strategy&, an "innovation unit" approach helps to clarify thinking around risk-taking and experimentation until executives are ready to absorb these units into the core business.

More broadly, greater economic integration focused on ensuring stability and protection for companies can bolster plans to expand across the region and beyond. These efforts can include reducing barriers to trade and recruitment.

Despite these gaps, executives are optimistic. Early successes are encouraging and a growing, young population cements future demand for digital products and services. "I'm confident that, five years from now, our region will be a very different place, a far more tech-focused region, with a big ecosystem to support digital businesses," says Mr Haji of Inagrab. "There's a real hunger here, an appetite for digital, and a lot of people willing to spend money on digital."

LONDON

20 Cabot Square
London, E14 4QW
United Kingdom
Tel: (44.20) 7576 8000
Fax: (44.20) 7576 8500
Email: london@eiu.com

NEW YORK

750 Third Avenue
5th Floor
New York, NY 10017
United States
Tel: (1.212) 554 0600
Fax: (1.212) 586 1181/2
Email: americas@eiu.com

HONG KONG

1301
12 Taikoo Wan Road
Taikoo Shing
Hong Kong
Tel: (852) 2585 3888
Fax: (852) 2802 7638
Email: asia@eiu.com

GENEVA

Rue de l'Athénée 32
1206 Geneva
Switzerland
Tel: (41) 22 566 2470
Fax: (41) 22 346 93 47
Email: geneva@eiu.com

DUBAI

Office 1301a
Aurora Tower
Dubai Media City
Dubai
Tel: (971) 4 433 4202
Fax: (971) 4 438 0224
Email: dubai@eiu.com

SINGAPORE

8 Cross Street
#23-01 Manulife Tower
Singapore
048424
Tel: (65) 6534 5177
Fax: (65) 6534 5077
Email: asia@eiu.com