


Middle East Primary Research Report

On-switch: Applied lessons on moving up the digital maturity curve

What separates digital beginners from leaders? No matter what your starting point is, our recent research sheds light on where and how much to invest, and the ROI and performance gains to expect.

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Cognizant



**Decision-makers
need some kind
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Introduction

We're 20% of the way through the 21st century. If your company is still around, congratulations, because many aren't.

By now, the stories of the decline and fall of great companies due to recent massive changes in technology and business are well known. We tick through the names like some kind of protective incantation, and chant the litany of companies we aspire to, digital natives like Google, Apple, Netflix.

Decision-makers, however, need some kind of on-switch to illuminate the path ahead. This study aims to do just that. By learning from senior business leaders — people actually *applying digital* in their companies — we can assess what's working, what's not, where investments are paying off, where we should start given where we are today, what separates leaders from followers.

In one of the most comprehensive studies of its type, we worked with ESI ThoughtLab, an innovative thought leadership and economic research firm, to survey 2,491 business and technology leaders from multiple industries around the world that collectively account for about \$21.6 trillion in annual revenue. We also interviewed senior executives who are knowledgeable about digital transformation within their companies. (For more on the study methodology, see page 34.)

Our findings reveal that in the Middle East, organizations are embracing digital, propelled by government support and the demands of a youthful consumer market. The region is emerging as one of the most digitally advanced markets in the world.

The Makings of a Digital Leader





Finding your place on the digital maturity curve

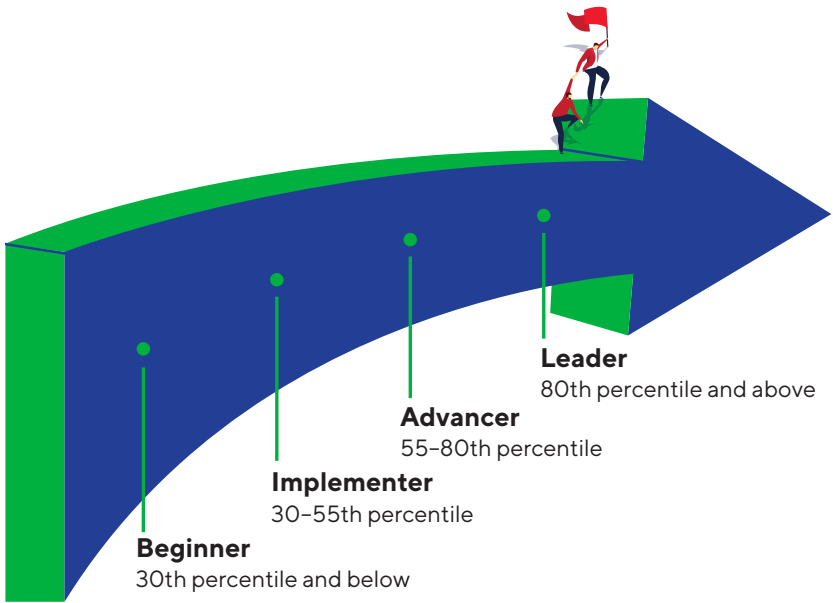


Figure 1

To better understand what a digital leader looks like and what it will take to move further along the maturity curve, we devised a framework to calculate a digital maturity score.

The score is based on three criteria:

- I Ranking on a digital transformation framework:** Created with ESI ThoughtLab, this framework scored companies on their progress across 13 key areas of digital transformation (see page 13 for the full list).
- I Ability to influence revenue through digital methods.** Drawing on self-reported data, we analyzed the level of revenue influenced directly or indirectly by digital channels.
- I Range of benefits generated through digital transformation.** This included operational benefits, such as speed to market and improving cost efficiencies, and more strategic ones, such as greater shareholder value and market share.

We created an indexed score of “digital maturity” for each respondent and assigned each to one of four maturity stages: “beginner,” “implementer,” “advancer” and “leader.”

Illuminating the Path Ahead






We're through the first inning of the Fourth Industrial Revolution

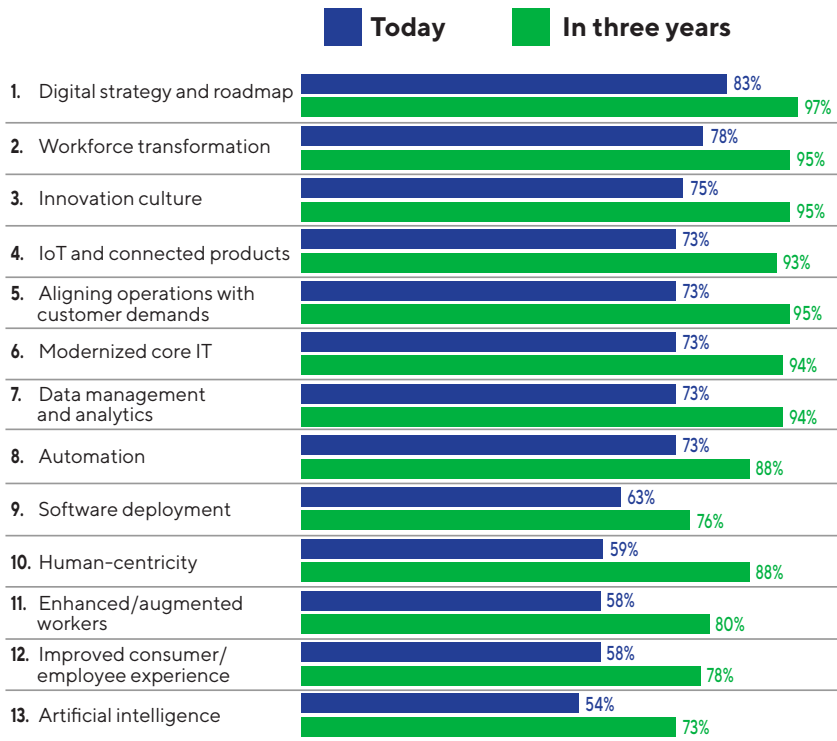
The vast majority of study participants are already well down the path of nearly every area of digital enhancement. This is what the World Economic Forum calls the Fourth Industrial Revolution (“... a fusion of technologies that is blurring the lines between the physical, digital and biological spheres”).¹

From strategy to innovation to Internet of Things (IoT) to automation to software deployment, companies throughout the world are now taking the future very seriously. Strategy, people, culture and core IT are all seen by organizational leaders as in-flight (being implanted) or even advanced.



The vast majority of study participants are already well down the path of nearly every area of digital enhancement.

Stage of digital transformation now and in three years



Response base: 2,491 business & technology leaders

Source: Cognizant

Figure 2

If you're investing <10% of revenue on digital, best of luck!

To understand the level of overall investment in becoming digital, we asked respondents what they are currently investing in all technologies (including central IT and enterprise-wide business unit budgets). Respondents across industries reported a surprisingly consistent level of technology spending, at 10% of overall revenue on average, and across-the-board plans to dramatically increase that to a massive 16% over just the next three years.

Considering the total revenue of all the companies in our study sample adds up to about \$21.6 trillion, this equates to about \$2.16 trillion in current annual technology investment, and around \$3.45 trillion, in three years.



Digital investment as a percent of revenue

Technology spend		Now	3 years	Growth
Total		10%	16%	60%
Industry	Media & Entertainment	11%	17%	55%
	Tech	11%	15%	35%
	Healthcare payer	11%	17%	59%
	Insurance	11%	17%	52%
	Life sciences	11%	17%	58%
	Healthcare provider	10%	17%	55%
	Telecom	10%	16%	55%
	Consumer	10%	16%	62%
	Financial services	10%	16%	62%
	Retail	9%	15%	61%
	Industrial manufacturing	8%	14%	73%
	Utilities	7%	12%	88%
	Middle East	11%	20%	76%
	U.S./Canada	11%	17%	58%
Europe	10%	15%	60%	
Asia Pacific	9%	14%	57%	

Response base: 2,491 business & technology leaders
 Source: Cognizant
 Figure 3

Where should you place your technology dollar/pound/euro/renminbi bets?

We can learn a lot from organizations that have already put money down on key digital technologies to help improve the business.

The lowest risk bets – cloud, mobile technology, cybersecurity – are now seen as no-regrets decisions. The vast majority of respondents say they received a moderate or high level of return on their investments. Even robotic process automation was seen as a high return on investment.

Things get a little less definitive regarding technologies likely to provide the greatest competitive differentiation. Managing data, deploying IoT solutions, new software configurations and AI all showed solid return on investment, but respondents said getting there was a bit riskier and yielded less spectacular near-term returns. However, as this study and others show, this is where winners are placing the biggest bets.

Percent of organizations that are receiving moderate or high returns



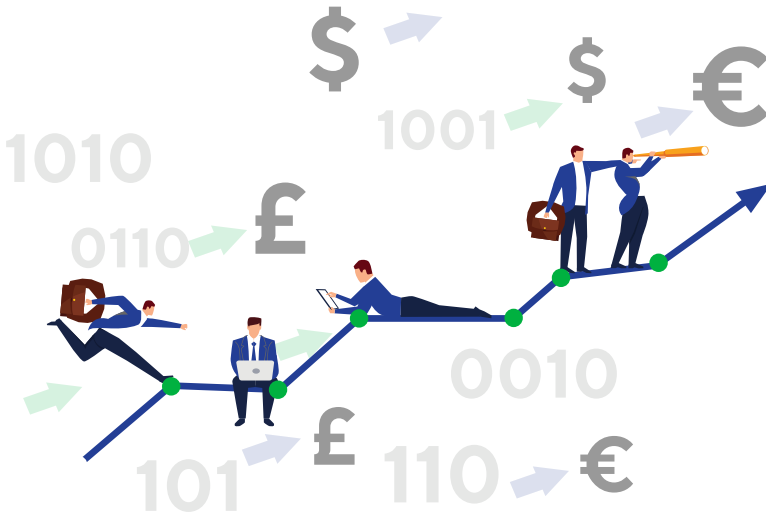
Response base: 2,491 business & technology leaders

Source: Cognizant

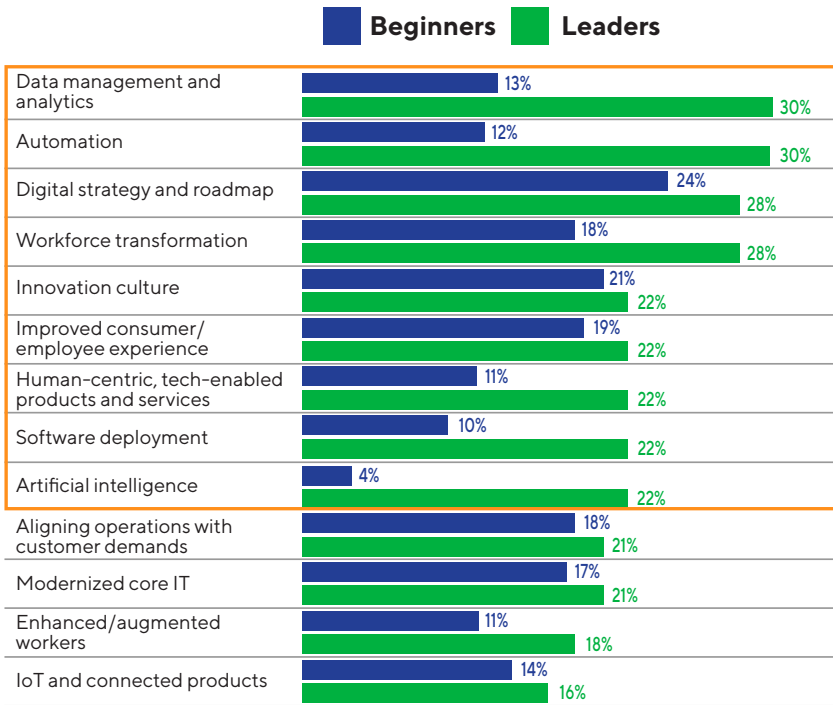
Figure 4

Managing your 0s and 1s leads to more \$s and £s and €s

The data shows with absolute clarity that being digital pays off. Leaders in digital are enjoying significant economic impact as a reward. When asked which areas of digital transformation have had the largest positive impact on revenue and costs over the last year, the difference between leaders and laggards is particularly vast in the areas of data management/analytics, automation, software deployment and new products.



Where revenue growth is coming from now



Response base: 2,491 business & technology leaders

Source: Cognizant

Figure 5

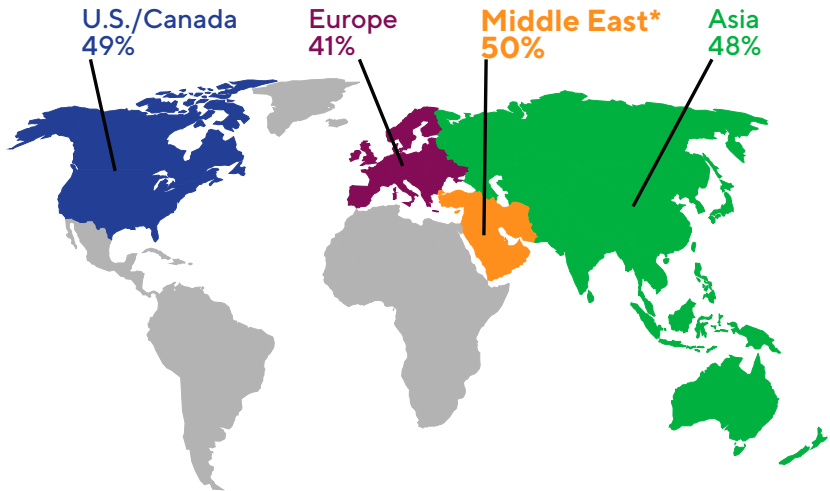
Digital Leadership in the Middle East





The Middle East embraces digital

Percent of organizations in each region that are
advancers or leaders



* UAE, KSA and Oman, only.

Response base: 2,491 business & technology leaders

Source: Cognizant

Figure 6

Our research shows there is a higher percentage of digital leaders and advancers in the Middle East than in the other geographies in the study.

Two main drivers for this aggressive move into digital include:

- Government support.** The UAE has unveiled several initiatives, including **one that aims to position the country as a global AI leader.**² Saudi Arabia's **Saudi Vision 2030** includes a variety of digital initiatives, including training, startup incubators, industrial investment, promotion of fintech and widespread use of wireless broadband.³ And Oman recently announced **a similar plan** to pivot to a knowledge-based economy.⁴
- Young populations.** With **the average age**⁵ in the Gulf Cooperation Council just 27, many of the residents in these countries are digital natives. At the same time that businesses need to gear their products and services to the expectations of young consumers, they can also leverage the skills of local talent to drive their digital ambitions.

Seeing the future through financial services' eyes

Financial services processes realizing digital benefits



Response base: 200 Middle East business & technology leaders

Source: Cognizant

Figure 7

Middle Eastern banks are already reengineering their processes to deliver products and services in a frictionless manner. A full 80% of banks surveyed are already seeing moderate to large benefits from digitizing payment processing and services, and that percentage will rise to nearly all banks (95%) in three years.

Banks across the region are embracing digital innovation. Emirates NBD is **undertaking end-to-end transformation** of its transaction banking platform as part of an AED1 billion commitment to digitalize its business.⁶ **Mashreq Bank** in the UAE offers mobile-to-mobile payments, cardless cash withdrawals and account access via Apple Watch and Facebook.⁷ Likewise, the **Commercial Bank of Dubai has launched** CBD NOW, which is targeting millennials and other digitally-savvy customers.⁸ Moreover, **First Abu Dhabi Bank** (FAB) has launched a new portal powered by AI and machine learning tools to deliver advanced analytics to merchants.⁹

Walking an uneven path

Percent of organizations that are advancers or leaders in key areas of digital maturity

	Middle East	All Regions	Difference
Digital strategy and roadmap	58%	46%	12%
Workforce transformation	47%	30%	17%
Automation	39%	35%	4%
Aligning operations with customer demands	35%	24%	11%
Improved consumer/employee experience	35%	17%	18%
Artificial intelligence	26%	19%	7%
IoT and connected products	23%	27%	-4%
Innovation culture	13%	28%	-15%
Human-centricity	12%	16%	-4%
Enhanced/augmented workers	11%	14%	-3%
Data management and analytics	9%	35%	-26%
Modernized core IT	8%	26%	-18%
Software deployment	7%	28%	-21%

Response base: 200 Middle East business & technology leaders

Source: Cognizant

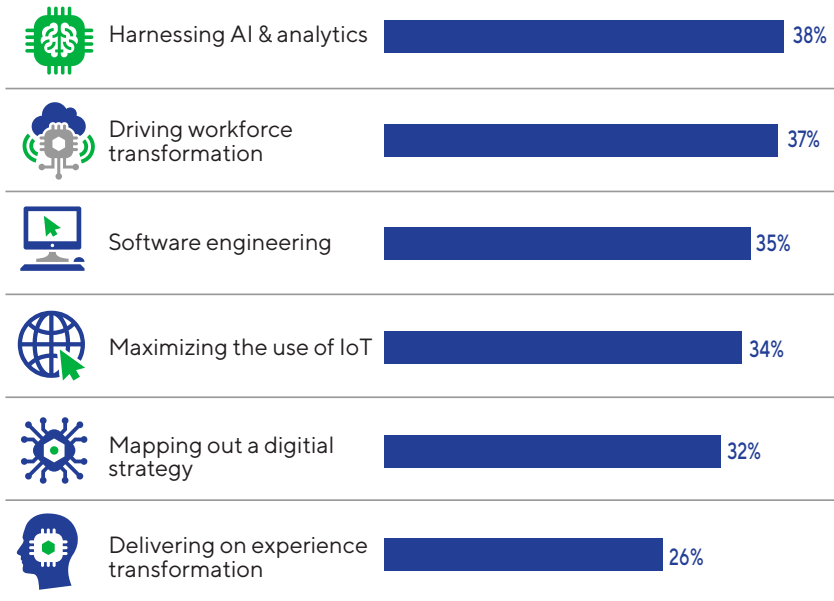
Figure 8

While Middle Eastern organizations are leapfrogging ahead in some key areas of investment, they're falling behind in others. Almost 60% are maturing or advancing in setting a digital strategy, and nearly half are ahead in workforce transformation. Companies in the region are also ahead in aligning operations with customer demands and improved customer/employee experience – important considerations for the region's young population.

Yet these same firms lag significantly behind in key foundational areas such as data management, innovation culture, software deployment and modernized core IT. Add to that regional headwinds from complex business practices and cultural conservatism, and it is not surprising that progress has been uneven and moving at a more deliberate pace.

The AI challenge

Challenges for Middle Eastern organizations



Response base: 200 Middle East business & technology leaders

Source: Cognizant

Figure 9

While we believe AI provides a huge opportunity for companies seeking to lead in the next industrial era — and is a key determinant of digital maturity — the complexity of these technologies and their social ramifications can pose a thorny challenge for Middle Eastern organizations. The region’s high investment in AI and automation can make workforce transformation a difficult balancing act. On the one hand, companies will need to upskill a workforce for massive industrial change; on the other hand, they will need to cope with the fallout from the elimination of traditional jobs, as well as **the new opportunities made available through AI and automation.**¹⁰



Lots of spending, lots of returns

Where Middle Eastern organizations are getting high or moderate returns

	Middle East	World avg.	Difference
Mobile technology/apps	96%	80%	16%
Cloud technology	89%	81%	8%
Cybersecurity technologies	86%	73%	13%
Robotic process automation	75%	69%	6%
Internet of things (IoT)	74%	66%	8%
Blockchain technology	70%	46%	24%
Geospatial/telematics	62%	49%	13%
Artificial intelligence	61%	59%	2%
Data warehouses, lakes, etc.	59%	64%	-5%
Digital assistants/chatbots	59%	55%	4%
Nanotechnology/smart dust	57%	41%	16%
Open platforms/API architectures	53%	61%	-8%
Drones	50%	38%	12%
Quantum computing	47%	37%	10%
Augmented and virtual reality	27%	44%	-17%

Response base: 200 Middle East business & technology leaders
 Source: Cognizant
 Figure 10

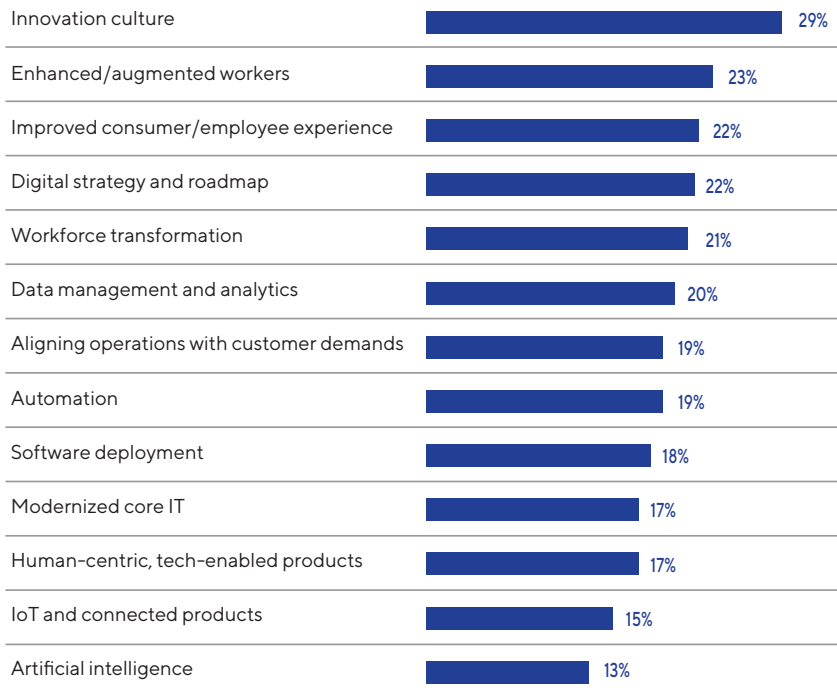
Over the next three years, businesses in the Middle East will plow some 20% of revenue into digital technologies. Because of their relatively larger investments, Middle Eastern businesses report bigger returns on these investments than companies in other regions. (One caveat: The absolute value of these investments is smaller than that of other regions because the Middle Eastern respondents in our sample typically have smaller revenue bases.)

This is particularly the case for mobile technology and apps, cybersecurity, blockchain and telematics. Given the value of nanotechnology to oil extraction, it's not surprising to see outsized returns on this technology.

While our data shows cloud computing investments to be high, we believe Middle Eastern businesses are still playing catch-up in this area. Fewer than one-third of respondents (28%), in fact, are moving core IT applications to the cloud, compared with the world average of 40%. Interest in cloud computing is high, but regulatory issues continue to restrict where data can be stored.

The road ahead

Drivers of revenue growth for Middle East companies



Response base: 200 Middle East business & technology leaders

Source: Cognizant

Figure 11

Despite the region's focus on technology adoption, the top five drivers of revenue growth relate to organizational transformation around culture, strategy, and people.

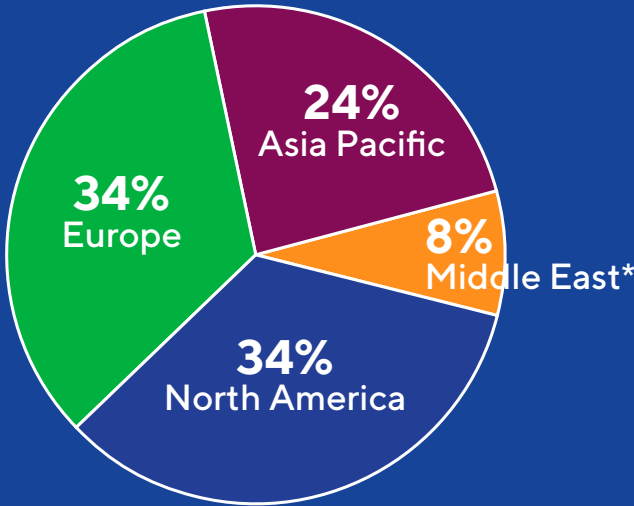
To achieve digital maturity, business leaders in the region should keep in mind that the most effective strategic roadmap is built not just on technology but also around strong data management, a culture of innovation and a well-orchestrated change process designed around human needs.



Methodology

Working with ESI ThoughtLab, we surveyed a cross-section of C-level executives from April to May 2019 and their direct reports across regions and industries, and from a mix of functions across the enterprise. The breakdown of the survey sample is displayed in the following graphs.

Respondents by region and country

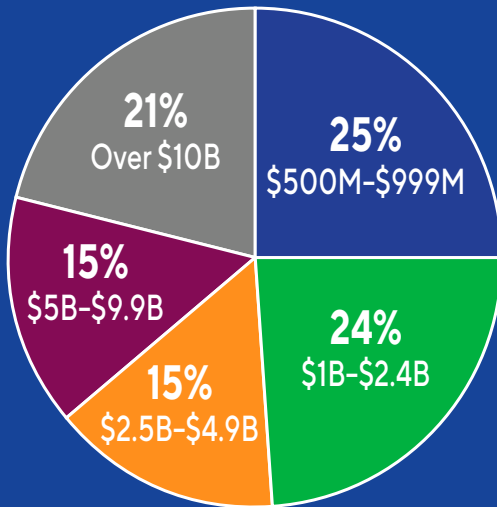


* UAE, Saudi Arabia, Oman

Respondents by industry

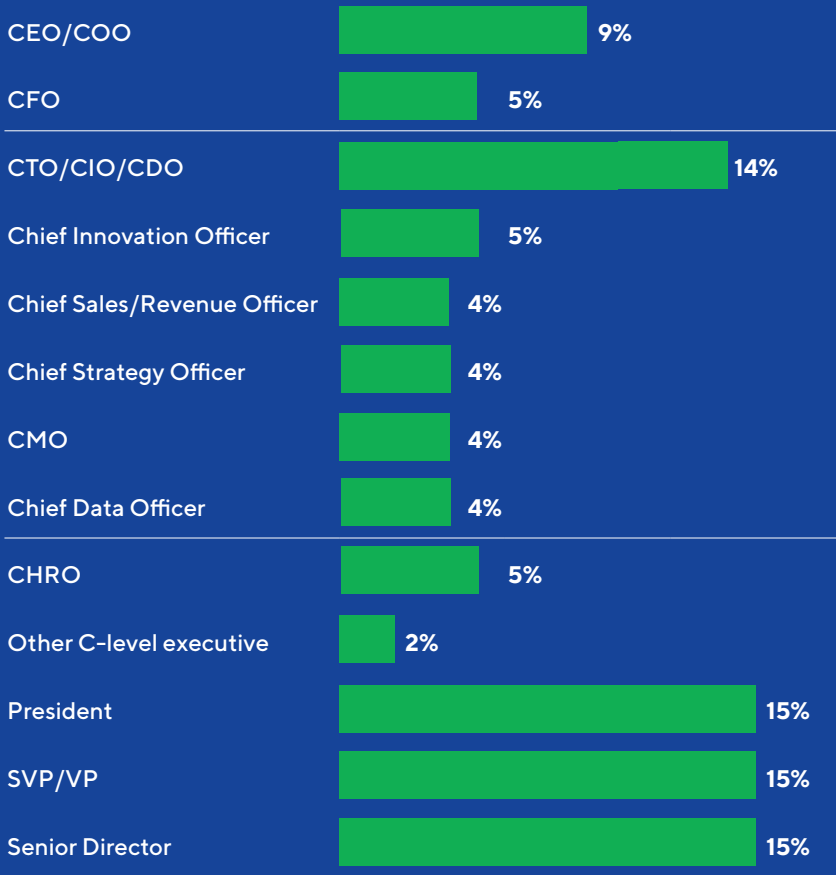
Respondents were spread evenly by industry (healthcare payers, healthcare providers, technology hardware, technology software, consumer products, financial services, industrial manufacturing, insurance, life sciences, media/entertainment/publishing, retail, telecommunications, utilities). Each of the 12 industries represented 8% to 9% of the sample, or approximately 200 respondents per industry. Hardware and software companies were combined into one of the 12 industries.

Respondents by revenue



Methodology (continued)

Respondents by title



(Percentages do not total 100% due to rounding)



Endnotes

- ¹ Klaus Schwab, "The Fourth Industrial Revolution: What It Means, How to Respond," World Economic Forum, Jan. 14, 2016, www.weforum.org/agenda/2016/01/the-fourth-industrial-revolution-what-it-means-and-how-to-respond/.
- ² "Cabinet Clears 10-Year Artificial Intelligence Strategy," Gulf News UAE, April 21, 2019, <https://gulfnews.com/uae/cabinet-clears-10-year-artificial-intelligence-strategy-1.63470566>.
- ³ Vision 2030 website: <https://vision2030.gov.sa/en>.
- ⁴ "Knowledge Economy to Get a Boost with this Oman State Council Office Decision," Times of Oman, Nov. 13, 2017, <https://timesofoman.com/article/121861/Oman/Knowledge-economy-to-get-a-boost-with-this-Oman-State-Council-Office-decision>.
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- ⁶ Emirates NBD Appoints New CIO and Chief Digital Officer," Finextra, Jan. 29, 2018, www.finextra.com/newsarticle/31587/emirates-nbd-appoints-new-cio-and-chief-digital-officer.
- ⁷ Mashreq Bank website: www.mashreqbank.com/uae/en/personal/digital-banking/mashreq-mobile.
- ⁸ "CBD Announces the Launch of UAE's First Digital-Only Bank CBD Now," CBD, Sept. 27, 2016, www.cbd.ae/corporate/about-cbd/media-centre/press-room/2016/11/27/cbd-announces-the-launch-of-uae-s-first-digital-only-bank-cbd-now.
- ⁹ Adelle Geronimo, "First Abu Dhabi Bank Rolls Out AI-Powered Analytics Portal," Tahawultech, Nov. 11, 2018, <https://www.tahawultech.com/industry/financial-services/first-abu-dhabi-bank-rolls-out-ai-powered-analytics-portal/>.
- ¹⁰ "21 More Jobs of the Future," Cognizant, October 2018, <https://www.cognizant.com/whitepapers/21-more-jobs-of-the-future-a-guide-to-getting-and-staying-employed-through-2029-codex3928.pdf>.

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Mehraz Parakh leads Cognizant Digital Business in the Middle East and is a Client Partner, managing strategic engagements in travel and hospitality, communications, media and entertainment, government and public sector. With 19-plus years of diversified IT experience across industries, he is focused on increasing Cognizant's digital footprint in the region by helping clients embrace new technologies such as IoT, big data analytics, artificial intelligence, augmented reality/virtual reality and robotics. During two decades of work experience, Mehraz has worked with major companies across the globe, notably in the Middle East, Asia, Europe and U.S.

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