



BIONIC CHAMPIONS IN THE MIDDLE EAST:

LESSONS FOR ALL IN TRANSFORMATIVE DIGITAL OPPORTUNITIES

Rami Riad Mourtada, David Panhans & Michael Grebe

Digital Maturity is Key During Unprecedented Challenges

Companies around the world are increasingly using digital technologies to unlock new sources of competitive advantage, growth, and value. Digital strategies and capabilities have continued to dominate leadership agendas as successful businesses leverage broad digital transformation efforts to drive productivity, resilience, customer satisfaction and speed to market. With COVID-19, much has changed, but the importance of digital in securing a company's future has not. The pandemic has jolted not just people, governments and healthcare systems globally, but businesses too. Multiple shocks – to product and service demand, customer interactions, supply chains, workforces, and core processes – highlight the need for higher organizational resilience. Indeed reliable, efficient and agile performance has never been more important.

For some businesses, driving post-shutdown growth as the economy recovers will

mean the difference between survival and not. Industries hit most sharply early on – such as oil and gas, aviation and hospitality – must now confront profound misalignments between demand and supply, not just today but for the foreseeable future. Manufacturers are dealing simultaneously with declining orders and supply disruptions. Most service sectors, given their high rates of direct customer interaction, are both rapidly accelerating delivery of broader digital services and re-thinking their physical footprints. Amid an emerging global recession, these challenges become even more complex for many companies across all sectors.

The Middle East has not been spared and faces its share of difficulties. Lower consumer confidence and widespread financial tightening have curtailed economic activity in general, with recent research findings showing that the majority of Middle East households have markedly reduced their spending intent¹, and that B2B spending intent is materially declining for most pur-

chasing managers². The collapse in domestic and foreign demand for services and products, combined with labor shortages and production stoppages, that challenged many businesses – research shows the majority of retailers’ supply chains are under stress³, exacerbated by a sudden 50%+ rise in e-commerce due to lockdowns⁴.

Middle East organizations must now simultaneously elevate their resilience and focus on business outcomes, including profitability and growth. Digital – particularly technology and data enablers – offers the means to do so, and leading and innovative companies – which BCG describes as bionic – are pioneering the way.

Bionic organizations (re)design technology, human activity, and outcomes around each other. They seamlessly blend the capabilities of humans and machines to create unique customer experiences and relationships, more productive operations, and accelerated innovation and growth. Leveraging AI, machine learning, data sensors, computing power, mobile and robotics, these businesses are augmenting and automating processes, and redeploying people toward more creative, strategic, and relationship-focused work.

Underlying and enabling this are technologies and data – pervasive and connected across every aspect of the enterprise. When companies develop their strategies and plans for post-COVID recovery, understanding their level of digital maturity – i.e. how well they have leveraged digital in their core operating models – is crucial.

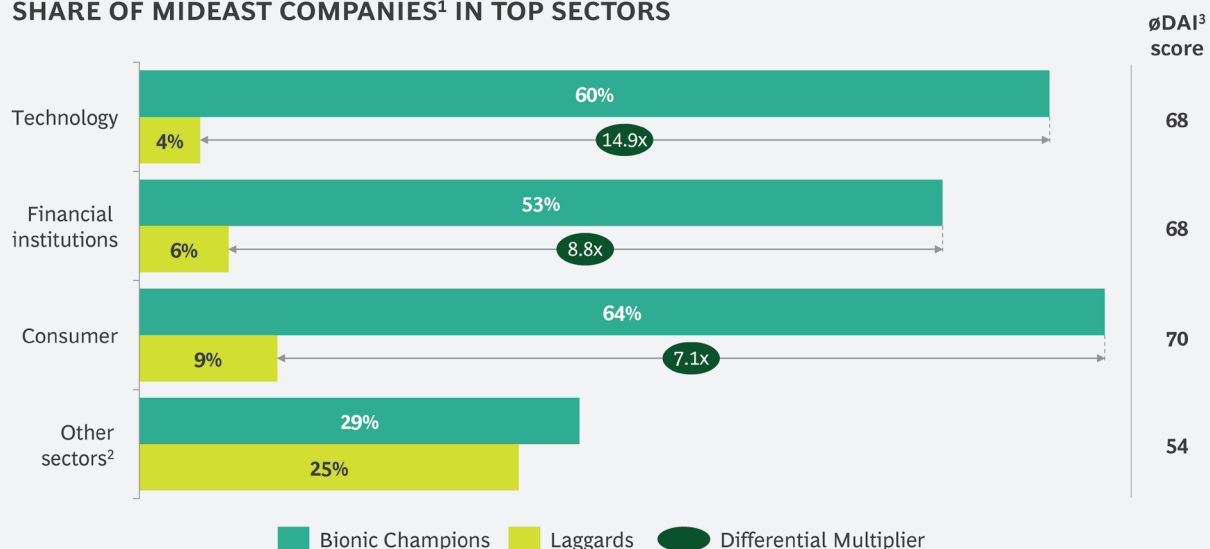
“Bionic” Companies Deliver Stronger Performance

As part of a recent global digital maturity study, centered around our proprietary Digital Acceleration Index (DAI) framework (see [Methodology](#)), BCG surveyed ~150 companies in the Middle East, focusing on the largest companies in the GCC. Survey responses were used to identify Bionic Champions – those most digitally mature (with DAI scores at or above 67) – and contrast them with Laggards (with scores at or below 43). This article shares key findings on how these Bionic Champions outperform by leveraging digital.

Middle East survey respondents represented a broad cross-section of industries, at all levels of digital maturity. [Exhibit 1](#) provides a breakdown across sectors, showing average digital maturity DAI scores, and com-

EXHIBIT 1 | BIONIC CHAMPIONS’ SHARE IS HIGHEST IN THREE MIDDLE EAST SECTORS

SHARE OF MIDEAST COMPANIES¹ IN TOP SECTORS



Source: BCG global Digital Acceleration Index study (2020)

1. 150 companies; 2. Including energy, healthcare, insurance, manufacturing, media & telecom, and public sector; 3. Digital Acceleration Index

paring prevalence of Bionic Champions with Laggards.

We found that the technology, consumer, and financial sectors boasted both the highest proportion of Bionic Champions, and the highest multiplier differential with Laggards.

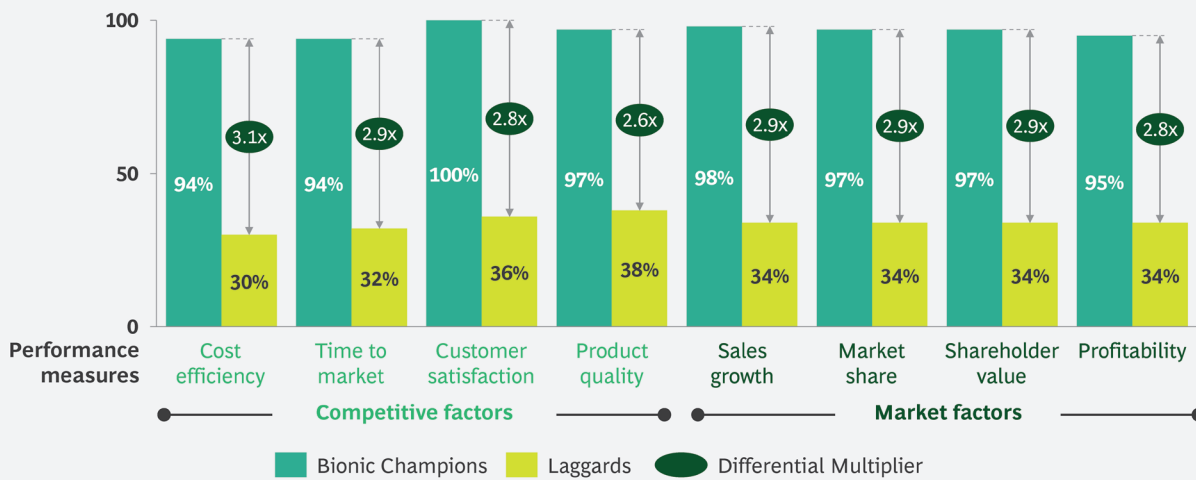
Many of the regional tech companies are “younger” than those in other sectors, and therefore more likely to have grown up with inherent, organic synergies among people, data, and technology. Consumer companies’ maturity reflects the industry-wide progress toward personalized experiences, as businesses have adapted to customers’ daily increasing digital sophistication and expectations. Both sectors have been leaders in leveraging latest digital tools – such as e-commerce, mobile, analytics, search engines, recommendation features, and social media – to customize service across physical and digital channels. Likewise, the high prevalence of Bionic Champions in the financial sector is the result of traditional banks’ shift from “bricks and mortar” to online customer interactions, and of increased competition from new FinTech companies in all areas of financial service delivery.

Overall, direct to consumer (i.e. B2C) companies in the Middle East have been most rapidly adapting to clients’ increasing comfort with on-line commerce and digital transactions.

The differences in performance are particularly striking when comparing between Bionic Champions – where digital is embedded in their value proposition, and in all elements of their operations – and Laggards, whose digital efforts tend to be function-specific and mostly reactive or ad-hoc. Bionic Champions in the Middle East scored ~3x higher than Laggards in performance relative to industry peers across a range of competitive factors including re-order as per exhibit below (see Exhibit 2). Results also indicated equally high achievement in market Reorder as per exhibit below. Global findings also show that Bionic Champion companies are likely to outperform across earnings growth, enterprise value growth and innovation potential. These benefits that increased digital maturity would confer on efficiency, customer satisfaction, innovation and sales growth are particularly needed in the face of COVID-19’s cost, workforce and demand challenges.

EXHIBIT 2 | MIDDLE EAST BIONIC CHAMPIONS ~3X AHEAD IN KEY MEASURES

SHARE OF MIDEAST COMPANIES REPORTED AHEAD¹ IN RESPECTIVE PERFORMANCE MEASURE



Source: BCG global Digital Acceleration Index study (2020)

1. Answer to “Over the last 3 years, what was your organization’s position in your industry with regard to [...]” as slightly ahead, ahead or Industry leader

So, what drives this apparent success? We see three ways in which digital maturity most strongly drives performance:

- *Combining large data sets with AI accelerates innovation, product development and testing*, thereby reducing time-to-market, and conferring a first-mover advantage. Recent regional examples include: Nala, which is the world's first Arabic AI health platform, allowing over 50,000 users to enjoy medical diagnoses with precision that alleviates human error through Nala's mobile app; and ENOC's Beema, which created the UAE's first pay-per-kilometer car insurance for both individuals and business fleets – utilizing data flow to optimize cash back amounts given to those who drive less, and leveraging big data on driving behaviors and patterns to personalize insurance premiums.
- *Tailoring customer experiences to their unique preferences and shopping history* increases satisfaction and brand loyalty. As seen with the recent examples of: Labiba, which provides native Arabic language processing through their proprietary platform to many leading corporate and government chatbots;

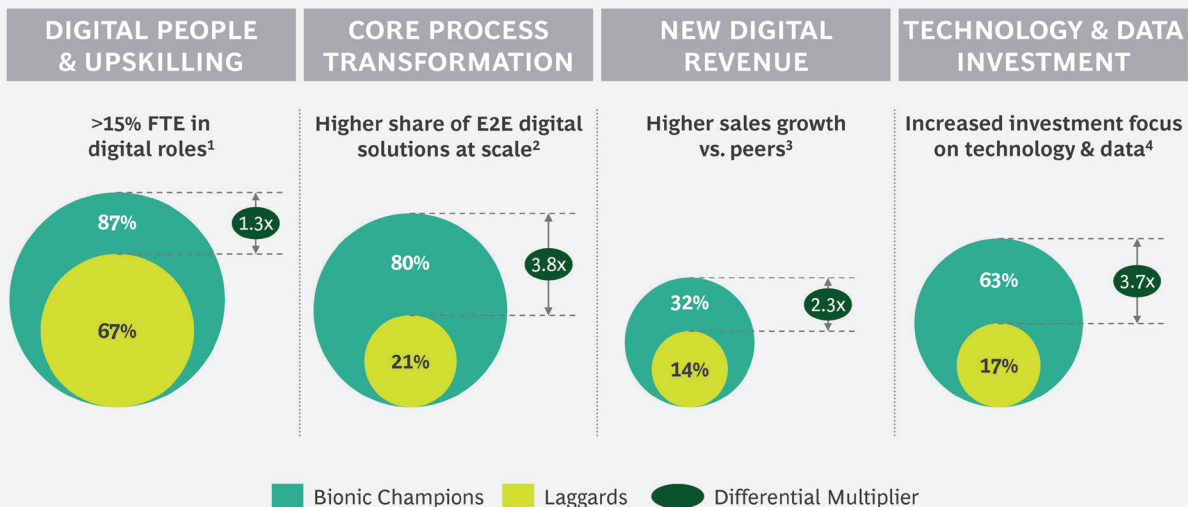
and ENDB's Liv, which uses an AI-powered chatbot to onboard users, answer customer service queries, and increase product awareness digitally.

- *Automating processes improves both efficiency and consistency and eliminates human error*, resulting in lower costs and higher product / service quality. For example: Mrsool is an on-demand transport solution that reduces delivery time and cost for SME e-commerce companies and restaurants; and Noon, which will shortly be launching driverless vehicles, designed for last mile deliveries to reduce costs and shorten delivery times.

Digital “Boosters” Accelerate Bionic Transformation

Today's COVID-19 crisis demands a rapid and comprehensive response and Bionic Champions are better positioned to take decisive, effective action. BCG's research and case experiences have identified four practical, proven digital “boosters” an organization can leverage, regardless of level of maturity – meaning both organizations that have already started the path of digital transformation, and those that can re-ori-

EXHIBIT 3 | MIDDLE EAST BIONIC CHAMPIONS APPLY FOUR KEY DIGITAL “BOOSTERS”



Source: BCG global Digital Acceleration Index study (2020)

1. Share of FTE dedicated to digital roles; 2. Share of key “operations/manufacturing” processes have already been significantly transformed using digital technologies (AI, I4.0 etc.); 3. Share of companies ahead of the competition regarding sales growth; 4. Share of companies with digital investment focus on technology and data

ent and carve out investment to firmly commence the digital journey. These digital boosters are summarized in [Exhibit 3](#) and discussed below.

Digital people and upskilling. 87% of Bionic Champions had more than 15% of their FTEs in digital roles, compared to 67% of Laggards. While data scientists and engineers are obviously important roles and becoming more widespread, areas like marketing, product development and service channels should fill roles with people who are sophisticated in working with data and adept at using technology, thereby complementing new specialized digital roles (such as digital media managers, agile coaches, UX designers, data scientists, etc.). As people further shift toward designing, auditing, and innovating processes – versus just operating them – digital, design and technical skills, as well as qualities like adaptability and willingness to learn, are even more paramount.

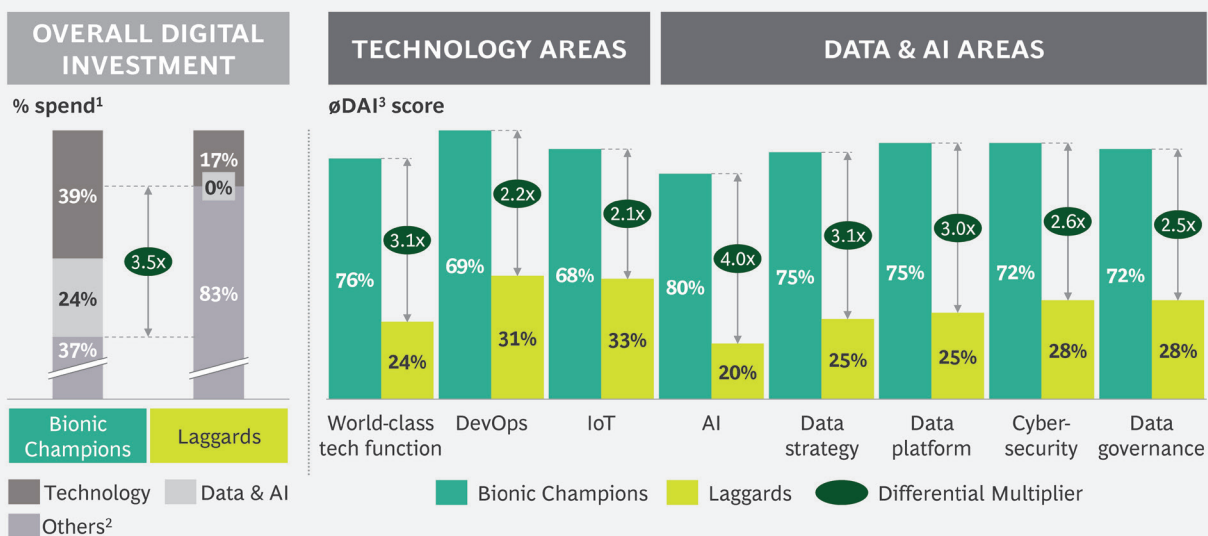
Core process transformation. Although most companies employ some level of process digitization, 80% of Bionic Champions – compared to only 21% of Laggards – can deploy digital solutions at scale; meaning consistently end-to-end across the entire

user journey or value chain. Digitizing core processes using the latest digital journey techniques – including robotic process automation (RPA) and AI – is essential to driving efficiency, consistency and customer satisfaction. More broadly, these core process transformations help improve overall resilience to meet sudden demand swings and operational disruptions, like those seen during the most recent COVID-19 crisis.

New digital revenue. 32% of Digital Champions said that their revenue growth – including new revenue from digital solutions – is ahead of the industry overall, compared to just 14% of the Laggards. As business models shift from straightforward product / service delivery to cultivating customer relationships, new and occasionally counter-intuitive ways of using technology data to connect with customers are emerging.

Technology and data investments. Our study also found that Bionic Champions' investment in Technology, Data and AI averages 63% of overall investment, compared with only 17% for Laggards. [Exhibit 4](#) shows specific investment levels across key digital elements, with Bionic Champions' results

EXHIBIT 4 | DIGITAL INVESTMENT ~3X HIGHER FOR MIDDLE EAST BIONIC CHAMPIONS



Source: BCG global Digital Acceleration Index study (2020)

1. Share of companies with digital investment focus on technology and data; 2. Covers all other non-technology, non-data, and non-AI investments; 3. Digital Acceleration Index

consistently indicating an investment level ~3x higher than Laggards. The differential is most pronounced across investment in AI and in data platforms, as well as in building a world-class tech function.

These digital investments pay off, not just on the previously highlighted competitive and market performance measures, but also across more technical digital KPIs. BCG's global DAI results also show that Bionic Champions are more likely to be stronger in deployment of an overall API-connected digital landscape – across both adoption of an agile delivery model – and in percentage of core processes that are digitized.

There are already examples of regional companies succeeding with these “boosters”, as they accelerate and adjust their digital transformations. Recently, Emirates Airlines almost completely automated its end-to-end cargo processes at Dubai Airports, partnering with Dnata, to ensure seamless coordination with freight forwarders, agents and airlines via a cloud-based platform. It has materially increased its digital share of revenues through a radically overhauled mobile app, driving a ~23% increase in at-airport, on-board, and at-home

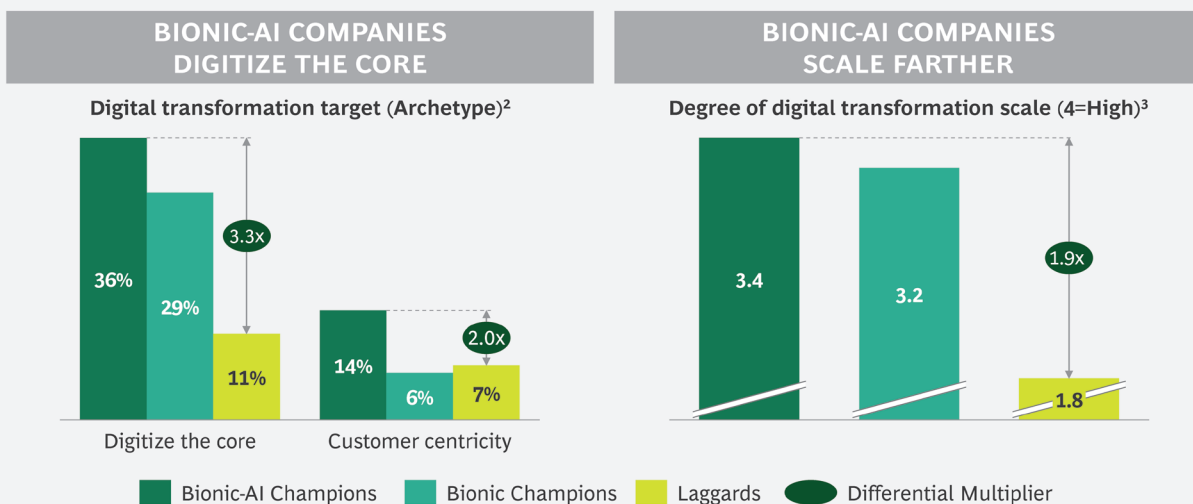
product and partnership revenues⁵. More directly related to the COVID-19 crisis, Noon recently introduced a completely new service line (Noon daily) that addresses customers' challenges with lockdown, hygiene and mobility, by leveraging its digitally mature core processes and systems to rapidly launch a new and differentiated product⁶.

Higher digital maturity also positions companies to “win in AI”. This is crucial as AI may be the most transformative technology of our lifetime. Exponential growth in data generation and computing power has fueled AI's recent explosive adoption, and the emerging ability of machines to observe, analyze, learn, make decisions and act has already touched almost every area of our lives.

Our survey further shows that there is a subset of Bionic Champions that place AI firmly at the center of their digital agenda and demonstrate an even higher level of digital ambition and maturity (see Exhibit 5).

These “Bionic-AI” Champions have 2-3x more focus on digitization of core processes and on customer-centric transformation (even higher than the broader Bionic

EXHIBIT 5 | MIDDLE EAST BIONIC-AI¹ CHAMPIONS STRONGEST IN MOVES TO “WIN IN AI”



Source: BCG global Digital Acceleration Index study (2020)

1. Bionic-AI champions are companies with data investment as priority #1, and top quartile across all data dimensions; 2. Share of companies by primary focus of digital transformation; 3. Average position of companies regarding digitalization progress of core business (from Low: assessing digital use cases to High: scaling up operative solutions to deliver full potential)

Champions group), and demonstrate a 2x higher maturity level on the scale of digital transformation, as compared to Laggards.

Towards a Bionic Future

With COVID-19's economic and business impacts, workforce disruptions (e.g., social distancing, working from home), and energy sector shocks, companies in the Middle East face urgent and unprecedented challenges. They are being called to urgently improve resilience, performance and growth. As we see from BCG's global DAI survey, organizations demonstrating advanced digital maturity appear better positioned to weather such storms and capitalize on pre-existing and emerging opportunities than their lagging peers.

Specifically, we have shown the concrete digital “booster” steps a company can take related to accelerated upskilling of people, broader and more customer-centric automation of processes, prioritization of digital revenue streams, and expanded technology and data investments. And while current financial circumstances might constrain certain investments for some companies, the temporary suspension of “business as usual” is giving many organizations a unique, and potentially time-limited, window in which to accelerate digital transformation and pursue innovative solutions.

Make no mistake: the path to becoming a true Bionic Champion is not easy. But technology can no longer be seen as an impediment to extraordinary value creation.

Instead the key barriers today are: people capability and skill gaps; legacy and internally-centered processes and organizational designs; dated and limited business models; fragmented and incompatible systems; and insufficient or inaccessible data. That's why the digital “boosters” are so transformative in directly addressing each of these gaps.

Leadership will undoubtedly be critical in both navigating through and accelerating out of this crisis. Leaders need not just a vision of their digital future, but also a clear strategic agenda and a workable roadmap

for rapidly undertaking such fundamental transformation. Leaders should start with engaging managers, company influencers and an increasingly broad set of employees to create both a shared sense of urgency and understanding, and a deep buy-in on the scale and scope of change needed.

Start with a few big digital use cases at the heart of the businesses, then apply the relevant “boosters” with all the vigor, resources and consistency needed to make a step change in these areas. Simultaneously insist on tangible business value, increased customer benefit, and a truly changed organizational mindset. Finally and crucially, communicate the resulting experiences and benefits throughout the business to build enthusiasm and readiness for the broader subsequent change.

LEVERAGING THE BENEFITS of digital is essential to Middle East companies as they navigate today's challenges and build a higher-performing and more resilient organization for tomorrow. Whatever the current level of maturity, there is a way forward, with new possibilities for Laggards and Bionic Champions alike. There has never been more urgency to become bionic, or higher potential for greater rewards.

NOTES

1. IPSOS, March 2020
2. Trading Economics, May 2020
3. Zawya.com, April 2020
4. IPSOS, April 2020
5. Arabian Business, April 2019
6. Noon.com, March 2020

DIGITAL ACCELERATION INDEX SURVEY METHODOLOGY:

Approximately 150 companies in the Middle East were asked to estimate their digital maturity on a scale of 1 to 4 in 36 categories. Aggregated raw scores were used to calculate each company's overall performance on BCG's digital acceleration index (DAI). Companies with a DAI of 67 to 100 qualify as Bionic Champions, while those with a DAI of 43 or less are categorized as Laggards.

About the Authors

Rami Riad Mourtada is a Partner & Associate Director in the firm's Middle East offices. He leads BCG's digital transformation topic in the Middle East. You may contact him by email at mourtada.rami@bcg.com

David Panhans is a Managing Director and Partner in the firm's Dubai office. He leads BCG's Technology, Media & Telecommunication practice area and coordinates BCG's Digital & Analytics efforts in the Middle East. You may contact him by email at panhans.david@bcg.com

Michael Grebe is a Managing Director and Senior Partner in the firm's Munich office. He leads BCG's Digital Acceleration Index (DAI) to measure digital maturity and BCG's World Class Technology Function. You may contact him by email at grebe.michael@bcg.com

Acknowledgments

The authors thank Michael Leyh, Alex Wada & Marc Roman Franke for research, data analysis, and other work that went into producing this article.

Boston Consulting Group partners with leaders in business and society to tackle their most important challenges and capture their greatest opportunities. BCG was the pioneer in business strategy when it was founded in 1963. Today, we help clients with total transformation—inspiring complex change, enabling organizations to grow, building competitive advantage, and driving bottom-line impact.

To succeed, organizations must blend digital and human capabilities. Our diverse, global teams bring deep industry and functional expertise and a range of perspectives to spark change. BCG delivers solutions through leading-edge management consulting along with technology and design, corporate and digital ventures—and business purpose. We work in a uniquely collaborative model across the firm and throughout all levels of the client organization, generating results that allow our clients to thrive.

© Boston Consulting Group 2020. All rights reserved. 07/20

For information or permission to reprint, please contact BCG at permissions@bcg.com. To find the latest BCG content and register to receive e-alerts on this topic or others, please visit bcg.com. Follow Boston Consulting Group on Facebook and Twitter.