

The Digital-Savvy C-Suite and Boardroom



Introduction

Digital transformation is rapidly affecting businesses across industries, business units and regions. Whether harnessed within companies internally or disrupting the marketplace externally by innovative competitors, digital capabilities are emerging as a transformational force.¹ Digital transformation leverages digital technologies and the opportunities they provide, thereby accelerating business activities, processes, competencies and models in a strategic and prioritized way.²

However, according to a recent MIT/Deloitte survey of managers and executives, while 90% expect their industries to be disrupted by digital technologies to a great or moderate extent, only 44% believe their organizations are adequately prepared for these digital disruptions.³ Additionally, a 2017 Boyden survey of more than 1,200 American adults reveals that most, or 53%, believe the management or senior leadership at their company is unprepared to implement a successful digital strategy. Meanwhile, only 14% say their company's leadership is "very prepared."

How should C-suite executives and board members prepare for and capitalize on digital capabilities? What characteristics and investments will be necessary for management to succeed? How can they mitigate challenges to reap the benefits of digital capabilities? And what changes to a company's organizational structure, culture and people should be expected?

Particularly outside the technology sector, these pressing questions face C-suites and boards as they work to understand the changing digital landscape and what it means for their companies at large and for their roles specifically. Recent responses have taken a variety of forms, with some adding a single digitally focused executive role, others reorienting specific departments to be tasked with developing a digital strategy, and others biding time as they assess the best path forward.⁴ Still, challenges and questions loom as company leaders work to find their place in this fast-moving digital world.

In this report, Boyden explores the challenges and opportunities that C-suite executives and directors must address in the digital environment, drawing upon secondary research, interviews with Boyden partners and leading executives in a variety of sectors, and a survey of American adults. Examining key trends, areas of investment, responsible parties, as well as regional and industry-based nuances, we will unpack what it means to be a "digital-savvy" leader and what this digital future holds for top-tier executives.

The Power of Digitization

What is Digitization?

Digitization is the process of leveraging a range of technology systems and software programs to develop algorithms and models that automate processes in an effort to cut costs, support better decision making, enable stronger performance tracking, and deliver deeper customer insights.⁵ Technologies and platforms that allow for digitization include social media networks, automated finance systems, IoT capabilities, robotics and artificial intelligence, among other platforms that capture and track data.

¹ <https://www2.deloitte.com/content/dam/Deloitte/nz/Documents/human-capital/decoding-digital-leadership-nz.pdf>

² <http://www.cio.com/article/3063620/it-strategy/digital-transformation-why-its-important-to-your-organization.html>

³ https://dupress.deloitte.com/content/dam/dup-us-en/articles/mit-smr-deloitte-digital-transformation-strategy/2016_MIT_DeloitteAligningDigitalFuture.pdf

⁴ <http://www.dmnews.com/marketing-strategy/the-shape-shifting-cmo/article/467380/>

⁵ <http://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/accelerating-the-digitization-of-business-processes>

"Digitization stands not only for putting more digital tools and methods in place, but also for a changing lifestyle, a certain mindset, the way leaders lead, the way organizations are put together and the way processes are being managed."

Armin Meier, Leader of Boyden's Global Industrial Practice and Managing Partner, Boyden Switzerland



"It is important to use digital tools because if you don't, you're out of the information stream. And very rapidly your peers are going to surpass you and you're out."

John Byrne, Managing Partner, Boyden Chile

Digital technologies have the power to help corporations and operations work in a faster, smarter and better aligned manner. With a commitment to automation, a consumer-centric process and seamless convenience, digitization allows for the power of all data to be combined into actionable information, observes Steve Nilsen, a Partner at Boyden United States, Atlanta. Ultimately, this information positions companies to profoundly impact all aspects of business, from innovation and production, to operations and sales, and ultimately, customer experience.

The Need for a Digital Strategy

Implementing digital tools in an effective manner can be daunting and overwhelming. Therefore, in order to successfully digitize and realize the benefits, it is important for companies to develop strategies that guide the implementation of these capabilities, delegate tasks, and ensure seamless transitions into a more digital state. Further, for a business to succeed in bringing in digital capabilities, it is crucial that its digital strategy encompass all aspects of business. Any single facet of an organization cannot enjoy digital fluency and the actionable information it offers without all departments, business units and teams collaborating to execute a unified vision of the digital strategy. A digitized finance department, for example, is of little value without an equally tech-savvy marketing department – and both are limited without a digital operations team.

Digital competencies should be built around an all-encompassing, corporate-wide mandate that covers all departments and all pieces of the business. As Avtar Monga, Chief Operating Officer at India's IDFC Bank indicates, **"The only way for a digital strategy to succeed is when it is part of the core strategy, not a support strategy."** When formulated correctly, this core digital strategy should complement, not compete with, all aspects of the business.

Why Now?

In recent years, it has become increasingly important for companies to bring in digital capabilities as their competitors begin to make these strides. Competitors have started to use digital tools to manage processes more efficiently, interact with customers in a more seamless and satisfactory manner, and innovate to offer new, advanced solutions. In order to keep pace with others in this fast-paced environment, it is important to be similarly exploring digital trends and looking for ways to innovate, so as to **"disrupt business models before the competition does."**⁶ As Jim Harmon, Managing Partner at Boyden Canada observes, **"Business leaders are realizing that digital innovation is the air that everyone's breathing and we'd better start breathing it too."** In this sense, it is important to implement a digital strategy, as it allows for differentiation and a competitive edge while others expand their own digital offerings.

⁶ [http://www.ey.com/Publication/vwLUAssets/The_digitisation_of_everything_-_How_organisations_must_adapt_to_changing_consumerBehaviour/\\$FILE/EY_Digitisation_of_everything.pdf](http://www.ey.com/Publication/vwLUAssets/The_digitisation_of_everything_-_How_organisations_must_adapt_to_changing_consumerBehaviour/$FILE/EY_Digitisation_of_everything.pdf)

Expert View:

Armin Meier

Leader, Boyden's Global Industrial Practice and Managing Partner, Boyden Switzerland



How would you define digitization and what it means for business leaders?

Meier: While digitization has to do with digital technologies, in my view it is something larger. Digitization is a big shift of trends, behaviors and mindsets due to the availability of technology and digital tools. Digitization stands not only for putting more digital tools and methods in place, but also for a changing lifestyle, a certain mindset, the way leaders lead, the way organizations are put together, and the way processes are being managed.

How does it affect the operations of the business if a leader is not up to speed digitally?

If a leader doesn't understand those implications, he will probably end up as the dinosaur somewhere in the corner trying to manage the way he did in the past. He won't really understand what's going on in his workforce and he won't even know the right questions to ask.

How do you think the employee base views this person at the top who doesn't quite understand the necessity to move forward in a digital world?

Meier: In this situation there is a generational shift where younger employees don't want to work for these old-style bosses. They want to work for a new style. In extreme cases they won't want to work for a company that doesn't understand the need to digitize and will leave. But more commonly, it will change the employee base's perception of leadership.

How does this perception change?

Meier: Years back, it was enough to have the word CEO on your business card and then you were the hero by definition. Today, titles have become less important. So, people will not just look at you as the hero because you are the CEO, but they will challenge you. They want to

know what you bring to the table, how you actually add value, and how you ensure we are going to win. If that CEO doesn't evolve, the managers or other employees just leave the company.

What do you predict will happen to those leaders who can't answer these questions?

Meier: There will be a shift of power from the top to the bottom, because know-how and knowledge are everywhere right now. It doesn't flow from the top to the bottom. It is everywhere. It is available. Everybody can get the same views and the same understanding of this world. And that will transfer power to the people who actually have true leadership capabilities.

What do these leadership capabilities look like in a digital world?

Meier: Some experiences will become more obsolete in a digital world but others will be necessary. The experience of inspiring people, of telling stories that move people forward, developing people, this experience will not go away even in the most digitized world. It becomes even more important.

What kind of capabilities do you see as most important for executives to possess?

Meier: It will be important to embrace change as a positive thing. I tell people that it is a privilege to live in a time like this, where you don't really know what the world will look like in five years. It is a privilege because it's interesting, and it's thrilling. So embracing change is important. The second is trying to be curious, to remain curious. It will be important to really be out there trying to understand what technology can do.

Who Should Spearhead this Change?

Companies typically struggle to identify an individual or group of individuals responsible for spearheading and executing a digital strategy. Many companies create new roles for this purpose while others repurpose old ones, redirecting their focus to a digital transformation. A long list of individuals are tasked with this mission, including Chief Marketing Officers, Chief Digital Officers, Chief Information Officers, Chief Technology Officers, and even Chief Executive Officers. As can be expected with such a diverse group of individuals, many competing opinions exist.



"Business leaders are realizing that digital innovation is the air that everyone's breathing and we'd better start breathing it too."

*Jim Harmon, Managing Partner,
Boyden Canada*

"I think any digital platform should sit with the Chief Marketing Officer," says Steven Cook, Former Samsung SVP, CMO North America and current Contributing Editor, CMO.com by Adobe. Cook contends that *"The CMO is the department lead that is closest to understanding the consumer, the marketplace and the competitive landscape. In this role, the CMO is best-positioned to use the martech stack and big data available through various digital and social channels to inform the rest of the organization of trends and changed consumer behavior in the marketplace. This includes informing the CEO, C-suite and board of real-time changes and trends. Still, the CMO will only be successful in this role when working in partnership and strategic harmony with the CIO, the CTO, Chief Sales Officer, and ultimately, the C-suite at large."*

The CDO is another position often tasked with executing and managing a digital strategy. The role of the CDO is particularly helpful in initially formulating a digital strategy, offers Myriam Cilleros, a French B2B industrial marketing consultant and former marketing and sales executive with Alcan and Rio Tinto. She explains, *"You need to start from somewhere and having a Chief Digital Officer in the beginning, working on raising awareness, communication and training, is important."* In this way, the CDO can help develop and define a roadmap for the organization as it works to launch its digital transformation. However, Cilleros suggests that once this roadmap and strategy are fully defined, the CDO should pass the responsibility over to the various departments within the organization so that each can implement the strategy internally and become fluent in the relevant functions.

According to Noor Menai, President and CEO of CTBC Bank USA, the ultimate responsibility to ensure the execution of a digital strategy rests with the shareholder. He believes that the sort of disruptive change that a digital strategy brings rarely happens without the demands of shareholders. Companies are comfortable in their old ways, operating under old strategies, and will resist this massive change and investment unless it is forced upon them by shareholders.

Looking at this through a historical lens, Menai explains that this sort of staggering change has happened in banking at the demand of shareholders in the past, particularly with the first internet boom of 1999. At that time, banks operating under traditional strategies were under pressure from shareholders and activists who were demanding that they invest in and commit to a technology strategy in order to keep pace with the software firms. Ultimately, banks invested in this technological course, which demonstrates the power of the shareholder to demand sweeping changes.

Despite the role of particular players in implementing a digital strategy, in order for a digital strategy to be successful in touching all parts of a business and working as a core strategy, direction must come from the CEO. As Edmundo Dupre Echeverria, CEO of the Chilean Lottery and former Head of CORFO says, *"If you have a CDO or someone of the like responsible for the digital vision, some departments will comply with digital requirements, but it will not be the whole company. Only the CEO would be enough to make the entire company change course towards digital tools."*

Enacting an all-encompassing digital strategy requires change and adaptation, and only a CEO can enable and encourage this sort of large-scale transformation. *"Executive oversight of digital strategy is critical and this responsibility needs to be embraced by the CEO. That level of gravitas and authority is critical to really affect transformational change in the way a company operates, its lexicon and how it measures itself. And, as conditions change, the digital strategy needs to change as well, making CEO engagement critical to keep everything moving in the right direction,"* says Tom Fowler, President of Polar Electro Inc. *"The CEO should be that individual in almost every case,"* he asserts.

Still, looking beyond even the CEO, there is consensus that all members of the C-suite and the board need to play a role in executing a successful digital strategy. Everyone needs to become informed and conversant in digital capabilities to be able to ask the right questions and propose the right investments and solutions. Further, without a signal from all members of senior management and the board that a digital strategy is paramount, departments and teams will resist this change. And with a successful digital strategy being one that touches all aspects of a business, this resistance must be mitigated with the endorsement of all leaders and management.

What Does It Take?

What Digital Capabilities are Necessary for Leaders?

In order to effectively spearhead the process of digitization, the C-suite and board should have a firm grasp on the power of digital tools and capabilities to enhance business objectives and processes. These leaders should approach technology and digitization by questioning how these innovations can alter, change or optimize business. They should explore what the technology can offer them and then bring the innovation into their business to actually derive that value.

Among the objectives and processes that leaders should consider when evaluating a digital path are the importance of cybersecurity and safety, the ability to lower cost structures using scalable models, and the goal of understanding the customer journey. Digitization offers new data, insights and connectivity, allowing businesses to better reach goals of security, efficient cost structures, and customer insights. Leaders should examine digital platforms through the lens of these types of objectives to understand the potential impact.

This process of digital exploration to meet business objectives requires a level of digital fluency among boards and senior executives. Oscar Landerretche, Chairman of the Board of Codelco, the world's largest copper mining company, indicates that these tools can be extremely complex and that *"It is important that the leadership and the board be able to grapple with complexity."* These leaders, Landerretche suggests, must understand not only the tools themselves, but also the implications from a business and societal perspective. Polar's Tom Fowler explains further, saying, *"It's not essential that you be an expert. You don't have to be a Silicon Valley guy to be an effective board member or C-suite executive. But, if you don't have an appreciation and a generally conversant grasp on the way the digital side of the equation works, you're operating half blind."*

While this greater technical understanding of digital capabilities and tools is important, it is secondary to the personal characteristics and traits that make it possible for the C-suite and board to lead amidst digital disruption. To this end, natural leadership skills have perhaps never been more elemental. As Armin Meier, Leader of Boyden's Global Industrial Practice and a Managing Partner at Boyden Switzerland explains, *"The experience of inspiring people, of telling stories that move people forward, developing people, this experience will not go away even in the most digitized world. It becomes even more important."*



"While the qualities of great leadership haven't changed, what is true about business today is that the rate of change is only increasing. There will always be a new technology, a new competitor, a new consumer behavior, a next frontier that is coming faster and faster to every organization. Understanding how digital change will impact the company, the industry and shape the future is imperative."

Lindsay Landsberg, Principal,
Boyden United States, Chicago

In this digital world, leadership entails garnering the respect and trust of those around you that you are equipped to guide your company into this tumultuous space. It means listening, asking the right questions and making decisions that take your company in the right direction. It's important to understand where your industry is headed and what challenges and opportunities lay ahead, particularly in a fast-paced corporate world where the next stages are rapidly approaching. Leaders have to be able to pivot quickly and remain comfortable in a state of ambiguity. In this sense, technology and digitization is not a device in its own right, but rather a tool enabling successful leadership and guidance.

This ability on the part of an organization's senior leadership to lead a digital transformation is not about a particular capability, tool or piece of technology. Rather, it is a mindset that allows for continuous curiosity, adaptation and evolution. Ultimately, this state of mind and natural curiosity allow a successful C-suite and board to build a bridge between today's conditions and tomorrow's vision.

Impact on Organizational Structure

Greater integration of digital capabilities may change the composition and structure of organizations. Traditionally, companies were arranged under a hierarchical design, where information flowed down from those at the top. Under this model, those at the top brought experience and knowledge, granting them license to make decisions, which would then trickle down throughout the company and touch various departments. These departments operated in siloes, each internalizing the information relevant to its own work and bypassing unrelated information intended for other business functions. As IDFC Bank's Avtar Monga explains, *"Each of those departments actually worked almost like an independent unit without having to think about what the other independent unit was doing."*

The process of digitization, however, overturns this model. For a contemporary business to harness digital capabilities, knowledge of digital processes needs to run up and down and across the workforce. All levels of employees have equal authority to innovate digitally, as experience is not a qualifier for digital discovery. Furthermore, every department has the responsibility to implement a company-wide digital strategy and is bound to the others in ensuring digital innovation and success. In this way digitization enables convergence: It connects the internal to the external and the top to the bottom. It creates an ecosystem where, as Myriam Cilleros illustrates, there is *"a flow between all steps of your internal supply chain first, with industry 4.0 getting into the plants and connecting to the sales system, and then all the way down to the customer. All of these stages and steps can be connected into a flow of data, which brings a lot of transparency and a lot of sense and vision into what you're doing."*

This new organizational model, ushered in with digitization, breaks down siloes and walls, creates a more horizontal structure, and brings transparency and connectivity across functions and departments. This reimagined organizational structure will foster collaboration and growth. It will repurpose corporate culture and personality, and challenge people to work and think differently. While this will afford great new opportunities, it will also require leadership qualities at the board and senior executive level to successfully guide companies through this change and adapt to this new model.

Expert View:

Oscar Landerretche

Chairman, Codelco



What digital capabilities and qualities do you think are most important for board members to possess?

Landerretche: It is important that the leadership and the board are able to grapple with complexity. In the case of Codelco, there are four major cities in Chile containing thousands of people that actually revolve completely around what we do. A board member has to be able to contend with this significance and be able to weigh that against efficiency as well as against due diligence and transparency. So with technology and the ability to quickly process this data, board members need to be able to grapple with it and look at it in different ways.

What do you see as the major digital challenges facing Codelco?

Landerretche: The largest challenge with big data and digitization in mining is really with communications, because it's not that easy to transmit information in real time from caves and mountains. We have some remote operations, but this transmission will need to evolve. We're actually involved in some experimentation in this area.

With this experimentation underway, do you find that Codelco is open or resistant to innovation?

Landerretche: Codelco is a very old company in the mining business and many mining innovations of the last few decades were actually done at Codelco originally. The company is proud of its heritage of innovation, including the support for workers. The fact that Codelco has an important role in mining technology is actually a well-known fact. So people don't resist this innovation and they are proud of it.

Is there resistance when the issue of workers being replaced by technology comes into play?

Landerretche: The issue of workers being replaced by machines and the difficulties that this generates is an issue as old as capitalism itself. But the solution has never been to resist technology. The key is to find a social system that redistributes the benefits that technology offers in an efficient, fair way that respects people's dignity.

How is Codelco approaching this need to redistribute amidst the rise of digital tools?

Landerretche: When we're working on old mines that are really big and the bottom is deep and difficult to reach, it can be really dangerous and even expensive to send workers into them. So we have two or three mines that are remotely operated from the cities and it's fantastic. Many of the machine operators are retrained workers from the old mine and we've set up a technical college for them to be retrained. This is often not academic training that we've seen in other companies, where the guy in charge went to Harvard, has a master's or PhD and has them sitting down in a classroom.

How does Codelco structure this retraining program?

Landerretche: It's more oriented towards tasks and teamwork. And this is where technology, particularly gaming technology, is helping us a lot. I think that the gaming industry has an enormous potential for education and for retraining workers because it works so well with people who want to understand something that applies to them as miners, and where they can use the skills somewhere else if that's ever needed.

Challenges

The Investment

Despite the value that digitization brings and the opportunity it offers for C-suites, boards and organizations as a whole to function in new, more collaborative and connected ways, many obstacles still exist that challenge the implementation of a digital strategy. A key challenge is the sizable investment that is required in digital tools and capabilities, and the difficulty of using antiquated key performance indicators (KPIs) to demonstrate a return on this investment.



"The action should be with everybody in the organization. Everybody should wrap his or her head around it and understand what it means. This will only be successful if those at the top are aligned to make it happen."

Armin Meier, Leader of Boyden's Global Industrial Practice and Managing Partner, Boyden Switzerland

As Boyden's Steve Nilsen explains, *"The current data seem to show a negative return in the short run on technological investment, much like any investment in any new asset."* While these investments do result in payback over time, it is not immediate and many traditional measurements do not apply. Codelco Chairman Oscar Landerretche suggests, *"Experience shows that these technologies take time. A lot of time. More than people would think. In fact, in mining in particular, these investments can take 10 to 15 years."* The lack of a more immediate return on the investment in technology poses a challenge. Boards and CEOs are under significant pressure from shareholders, analysts and activists to deliver growth and positive results on various metrics, including ROI, sales and revenue. This obligation to stakeholders often conflicts with making investments in digital capabilities that may not directly deliver on or contribute to these goals and metrics.

Still, while an investment in digital tools may not serve to increase profit margins immediately, as Myriam Cilleros adds, *"It builds social capital, market understanding and brand capital."* These qualities and platforms will make for a more competitive organization and, as such, are worth investing in. Therefore, to combat the challenge of lacking a return on investment in digitization, it is important for companies to develop and set new types of KPIs that provide different measurement methods. These new KPIs can be measured from a marketing or operations standpoint, and examine such areas as cost savings and customer satisfaction.

In the digital world, measurements and competitive edge will look different from traditional profitability. Thus, it is fitting to develop new metrics that measure the value of and make the case for digital investments. Additionally, as Boyden's Nilsen contends, *"The only alternative is, of course, to do nothing and fall so far behind competitors that there is no way to even catch up."* With this angle in mind, company leaders must invest in innovation and, to combat the challenges associated with this investment, develop new KPIs that speak to the value of digital investments.

The Training

In addition to the monetary investment required to implement a digital strategy and the accompanying challenges, it is also necessary for a company to invest in digital training for employees. This type of training can take a variety of forms and involves the training of junior employees as well as the C-suite and board. As Sunil Suresh, former CDO/Director of Digital & E-Commerce at Yum! Brands explains, one effective way for a company's senior leadership to train and immerse themselves in digital capabilities is through the process of reverse mentoring, *"where you actually force the C-suite leaders to have a more junior digital employee as a mentor and spend some time together shadowing them throughout the day so these leaders gain an appreciation for how these individuals engage with digital and how naturally they expect everything around them to be digital in terms of their interactions."*

Another avenue for the senior team to become educated and familiar with digital tools, as Boyden's Armin Meier indicates, is to visit a technology hub where teams can fully engage in the processes and understand



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Steve Nielsen, Partner,
Boyden United States, Atlanta

where digital trends are heading. Meier suggests that entire executive committees "*go to places like Shanghai, Palo Alto, Berlin to meet companies and leaders and expose themselves to what happens out there. What's the current thinking? What's coming up next?*"

Once the board and senior executives gain this appreciation and exposure to digital processes, it is important for these leaders to then encourage digital education throughout the workforce. Polar's Tom Fowler suggests, "*It really does start from the senior leadership, and the easiest and most effective way to train the workforce is by making the digital suite part of the daily lexicon in the way that the leadership speaks to the company.*" Fowler continues, explaining that people "*will become curious if you start using the language of the digital suite in your regular communication up and down the organization.*" As a result, they will feel motivated to immerse themselves in digital capabilities in an effort to better understand these tools that are driving both business and leadership's communication.

Codelco Chairman Oscar Landerretche provides further insight into digital training that stirs interest among employees. He explains that often the machinery used in Chilean mines as remote as the depths of the Andes is, in fact, operated remotely from cities by people who years ago were working in the mines themselves. "*Many of the machine operators are actually retrained workers from the old mine and we've set up a technical college for them to be retrained.*" With the company's digital emphasis clearly communicated by the establishment of this technical college, employees are interested in receiving training. "*These workers understand that this is the way things are moving and they want to gain these skills...so you end up with a culture where people really just like to get retrained,*" he adds.

Still, according to the 2017 Boyden survey, Americans are split over the extent to which they think their company is emphasizing training on digital strategies and capabilities. Only 48% say their company is placing a great deal of or some emphasis on digital training, while 52% say their company is emphasizing this training minimally or not at all. These findings point to an opportunity for companies to engage more heavily in training their employees on digital skills in an effort to realize the benefits of an effective digital strategy.

The Gap between Experience and Digital-Savviness

Another challenge is the generational gap in digital fluency. As Lindsay Landsberg, a Principal at Boyden United States, Chicago explains, "*While the generational gap in digital fluency is receding, there are still cases where older executives hold back from immersing themselves in digital skills. Not participating in social media, online shopping, online banking, playing with new apps, etc. is missing an opportunity to understand how consumers now communicate, experience a brand and shop for products. Those senior executives with the most work experience and deepest institutional knowledge of an industry and company are often the least knowledgeable when it comes to understanding the impact of new technologies and investments in talent and technology that may be needed to stay relevant.*"

Boyden's 2017 survey reveals that older Americans are less confident in their digital skills than younger Americans. In comparing their digital knowledge to that of the management and senior leadership at their company, over half of those who are 50 years or older believe that they are less knowledgeable (55% of those 50 to 64 years old and 60% of those 65 years or older). On the other hand, at least six in 10 younger Americans consider themselves more digitally knowledgeable than senior leadership at their company (68% of those 18 to 24 years old and 70% of those 25 to 34 years old).

To overcome this challenging age gap, it is important for leaders to recognize that, while experience serves them well in many ways, the emergence of digital capabilities has created new solutions to problems that did not previously exist. In this sense, experience is of little value when implementing a digital strategy and, as suggested by Boyden's Armin Meier, may even serve as an impediment for digital innovation and change.

Though experience may not translate into digital skills, older directors and senior executives can still leverage their experience as leaders to offer their companies the leadership qualities and guidance that is most important amidst digital transformation. Additionally, understanding the emergence of new, more horizontal organizational models will allow C-suites to comfortably learn digital capabilities from younger colleagues whose skills may surpass their own. Finally, as IDFC Bank's Avtar Monga suggests, with a certain level of willingness and time, a company's top executives will develop an ability to learn the new terminology, techniques, and technologies.

Hiring the Right Talent

Identifying and hiring talent with digital experience and skills is another challenging aspect of creating and implementing a digital strategy. But the success of the strategy may well depend on finding those who have, as Boyden's Jim Harmon describes, "*a 'digital consciousness' – those who think in digital, much like true fluency in a language.*" It can, however, be extremely difficult to locate these individuals. Harmon goes on to explain, "*Digital consciousness is as challenging to identify as any behavior competency.*"

Further, upon identifying those with digital skills, it can be a challenge to hire them because, as Boyden's Lindsay Landsberg indicates, "*They'll look at the company for cues that they'll be understood, their skill sets will be valued, they'll have interesting, challenging work and that they'll be welcomed. Potential hires will explore the company's website, look for news stories about digital initiatives, and explore whether the leadership looks or sounds 'digital,' with a digital footprint across social media. When interviewing at companies they'll look for a modern hiring process – no filling out forms by hand – and a workspace that looks collaborative and inviting with whiteboards for team problem solving.*"

These cues of whether workplaces will offer rewarding careers for young potential hires stem from the digital savviness of the board and top executives. With digital hires proving elusive and difficult to recruit, convince and hire, it is important for management to foster a workplace culture that embraces digital skills and innovation. Signs of this culture will resonate with potential hires. Ultimately, to combat this challenge, it is the responsibility of the board and company leadership to build and lead a company open to change and receptive to innovation.

The Value Offered

Despite the significant challenges associated with the C-suite and directors spearheading a digital strategy and the obstacles that stand in the way, digital capabilities offer great value and opportunity. These opportunities range from more impactful employee engagement to greater customer engagement. By overcoming obstacles and mitigating challenges, leadership can implement a successful digital strategy and realize this added value.

Employee Engagement

Senior executives with digital capabilities have the power to engage employees and create rewarding workplace cultures and careers. It can be very empowering for younger employees, particularly those working on digital teams, to see executives who value digital tools and seem to understand the digital process. As Boyden's Landsberg suggests, this sort of validation of interests and skillsets can prompt younger employees to "*seek these executives out as mentors, as champions, as people to whom you might bring fledgling ideas that could be really great for the business.*"

This process is further pronounced by the fact that digital millennials are less hierarchical by nature than other generations, and as a result, feel comfortable interacting with those they feel they relate to,

regardless of age, seniority or position. This is coupled with the collapse in hierarchical organizational structures in favor of a more horizontal corporate design. The result is a level of interaction between younger, digitally inclined employees and older, executive-level mentors that creates a dynamic, rewarding and exciting work environment.

Customer Engagement



"The future is all about the relationship with the customer. And this is what digital enables much more than anything in the past. It enables a personalized relationship."

Myriam Cilleros, B2B industrial marketing consultant and former executive, Alcan and Rio Tinto

In addition to using digitization to engage employees, by harnessing the power of digital capabilities companies can understand their customers to a greater extent than ever before. Digital tools allow for the capture of huge amounts of data, which can be distilled to uncover trends and insights. These trends can paint a clearer picture of customers, including their needs, how they work, their pain points and difficulties, their priorities, what bothers them daily and what they would like to see changed.

This understanding of customers and their preferences, priorities and pain points provides direction for optimizing and improving customer relationships. Armed with these insights, companies can make internal improvements and develop new offerings and solutions that deliver seamless convenience and other customer benefits, which in turn strengthen customer relationships and foster loyalty.

One simple example of taking a consumer-centric approach in the deployment of technology to better understand and serve customers is, as Boyden's Steve Nilsen explains, the way hotels have transformed the process of finding, booking, and checking in and out of hotel rooms. Years ago, the process of finding a hotel, comparing prices, and checking in was labor-intensive, slow and frustrating. Hotels themselves identified this pain point, and as a result, transformed the process. A 60-90 second interaction to check in and zero seconds to check out is now the expectation. *"The entire process was rebuilt around the customer's experience. A single stumble in the long chain of tech-enabled events – from deciding you need a room to checkout and accurate posting of loyalty points in your account – is the difference between a happy customer and a lost customer,"* he adds.

Developing Regions

Though the responsibility of implementing a digital strategy amidst both challenges and opportunities is universal, there are differences and nuances surrounding the role and level of disruption of digitization on a regional basis. While some regions are further ahead in terms of the integration of and fluency with digital capabilities, others are still emerging in this area.

The Middle East

In terms of digital innovation and fluency, the Middle East, as an emerging economy, entered the market a bit behind several other mature regions and markets. In particular, certain digital and technological trends, such as artificial intelligence and robotics, have not yet become ingrained in the region. As Athena Tavoulari, a Partner at Boyden UAE illuminates, *"This region is very much people-oriented... the foundation of business and economy is still very much related to people and relationships."* Tavoulari further explains that these digital trends will certainly strengthen in the region, as the world is heading in one direction and the need for digitization is becoming increasingly important globally. However, the Middle East has not yet been completely upended by this machine orientation and is more immersed, as of now, in the benefits and value of human interaction.

Sunil Suresh suggests this late entry into the digital market provides both advantages and disadvantages for the Middle East. The greatest disadvantage is that late adoption and integration of digital tools leaves



"This region is very much people-oriented...the foundation of business and economy is still very much related to people and relationships."

*Athena Tavoulari, Partner,
Boyden UAE*

the Middle East with less digital expertise and skill than can be found in other regions. This poses a challenge when looking to hire talented individuals to help spearhead a digital strategy, and often talent is recruited and hired from the UK or India.

However, the major advantage to coming into the digital arena a bit later than some other regions is that the Middle East will not be held back by legacy. In this sense, the Middle East is actually in a position to leapfrog ahead and advance more quickly. As Suresh illustrates, in some regards the Middle East has surged ahead of other regions and, for instance, now has **"the highest penetration of smartphones and internet anywhere in the world."** Further, upwards of 70 to 80% of commerce in the Middle East is happening on mobile platforms. With these digital advancements in mind, he points out that **"everybody recognizes that [digital] is about to take off in the region."**

Latin America

Latin American countries are rather varied in their incorporation of and fluency with digital tools, which is largely connected to the level of tariffs placed on imports. John Byrne, a Managing Partner at Boyden Chile, explains that the average tariff in Chile is very low, at 0.6%, creating an open market that essentially has free tariffs with upwards of 90 countries around the world. This has allowed the Chilean market to bring in technology, and as a result, C-suite executives and board members across the country are quite familiar with and comfortable using technology. This has positioned Chile as a competitive player in the digital world where technological and digital innovation is expected and even necessary to keep pace with the competitive landscape.

Like Chile, Mexico has been very open to technological imports over the years, and as a result, has developed sophisticated digital capabilities. Additionally, Peru has an open market and its industries, including mining, oil and retail, have advanced technological and digital systems. Colombia is a bit further back from Chile, Mexico and Peru, but has been catching up in recent years. Many of the country's senior executives and management studied in the US or in Europe.

Argentina, on the other hand, until recently had tariffs that hovered at 45%, in effect closing the country off from technological imports. Certain industries and companies, particularly the big banks, were able to import these technologies, but across the board, up-to-date technology was largely inaccessible.

These differences in stages of digital and technological integration offer different opportunities and challenges by country. In the case of Chile, a highly competitive, open, market-driven economy has led to widespread adoption and use of technology and digital tools. This receptiveness to technology has, in turn, differentiated Chile as a test market and barometer for many major corporations looking to gauge how markets will react to new innovations. In this way, technological and digital imports have created opportunities for Chile to both enjoy a competitive digital landscape internally, and to emerge in the global arena as a test market for innovation.

Industry Importance

In addition to differences in digitization across regions, there are also differences and nuances by industry. While some industries have been completely rocked and upended by digital transformation, others have been only marginally impacted by emerging digital capabilities. Still, all industries, even those that have only experienced slight changes until now, are seeing digital rise in importance and have had to adapt to accommodate these powerful tools.

A wide range of industries has been completely transformed by the rise of digitization. Boyden research suggests that service-oriented industries have seen massive digital disruption that will only continue as

the way consumers explore, shop, communicate, compare and review products has changed for good. Boyden's Athena Tavoulari agrees that service industries have been the most transformed, indicating that ***"every industry that is more a B2C industry, rather than a B2B industry...it's more probable that these will become more digitally savvy in the next few years."***

The consumer industries that have been most transformed, as both Boyden research and Tavoulari contend, include media, telecommunications, entertainment, financial services, travel, tourism and retail. The next wave of transformation is just taking shape, with IoT technology transforming automotive and consumer electronics, as two examples.

Banking is also an industry experiencing great change with a need to adapt to the rise of digitization, suggests CTBC Bank's Noor Menai. In recent years, banks have faced the growing pressures of cybersecurity and safety, as well as the rising threat of FinTech companies out-competing banks and siphoning customers. As a result, banks have had to innovate and implement new digital models. These include solutions that allow customers to transfer money and handle all of their most frequent types of transactions online. All banks in the United States now have tools that allow customers to handle everyday transactions through technology.

However, beyond these frequent transactions that people are making approximately 80% of the time are less common transactions like trading and wiring money. While people are not going to use these functions as frequently, it is necessary for banks to provide them online in order for them to be completely digital. This is where the banking industry is still working to innovate and reach full digital capabilities, explains Menai.

Expert View:

Noor Menai

President & CEO, CTBC Bank USA



While it's now rarely the case that boards and executives don't recognize the importance of digital capabilities, many have not developed their own digital expertise. Do you see this in financial services and banking?

Menai: In the financial industry, it is becoming increasingly less of a choice for boards and executives to have digital expertise because, with the way governance standards are now being implemented by regulators, you are more personally liable as a board member to take responsibility for cybersecurity from the safety and standards perspective. Additionally, apart from what the regulators are demanding for cybersecurity, there is a strategic need to digitize because of the rise of FinTech companies. These companies pose a threat to traditional business models and are attracting customers away from traditional banks. To combat this threat, banks have had to innovate and implement new digital models.

Do you see pushback from executives and boards on the need to become digitally conversant?

Menai: I don't see as much pushback as I see a sense of disbelief. It's this comforting idea that this won't happen in our lifetimes, that we're different. Others may be feeling the need to digitize but not my business, because let me tell you why my business is different. Nobody thinks this is happening to them.

Given this reluctance, who do you think should be responsible for spearheading digitization and pushing executives and boards to adapt?

Menai: For the majority of public companies in the US, it's the shareholder who has the ultimate responsibility. This kind of disruptive change rarely happens without the shareholders or activists forcing it because there is such a level of comfort with the way things stand. There's so much money invested

in the old way that nobody wants to invest in building these new models. So the shareholder has to demand this change for it to occur. Most of the momentum that has taken place has been a result of shareholder pressure.

What qualities do you think are important for a C-suite or board to possess to enable this sort of change?

Menai: The most important qualities are curiosity and the ability to adapt. Without these qualities, there is a degree of denial that this change is actually happening and here to stay. So it is most important for companies to possess a learning capability and the ability to transform and adapt. And this responsibility, of building and leading an organization that can change, that's the CEO's responsibility.

Is it necessary to have board members from the technology field to see this vision through?

Menai: I think it's important, not necessarily to have someone who previously worked at a technology firm, but to have board members who are familiar with the promise of technology. It's helpful to have someone who understands the power of technology and knows how to get it implemented through team-based collaboration. That doesn't necessarily mean bringing in a coder or a software engineer, but someone who has the experience and vision to see this transformation through.

Emerging Trends

As the C-suite and board learn the skills and overcome the challenges necessary to implement a successful digital strategy, there are some important emerging digital trends to identify and explore.

Artificial Intelligence

One emerging digital tool that is important for C-suites and boards to understand in terms of how it can impact and optimize business processes is artificial intelligence (AI). AI is the process by which computer systems perform tasks that would traditionally require human intelligence. Through this process, computer systems analyze large amounts of data to create and optimize models and algorithms that allow them to carry out tasks such as decision-making, visual perception and speech recognition.

As Polar's Tom Fowler clarifies, *"AI can be an extremely valuable tool that reduces friction and eliminates barriers that management has been obliged to tolerate. Likewise, for consumers, AI reduces friction in the way they access and experience products and services. In this way, AI creates a more seamless and less cumbersome process for both management and consumers to arrive at what is really important."*

Artificial intelligence in action: e-commerce

One example of a way in which AI provides opportunity for reducing friction is in e-commerce. With the advent of AI, online shoppers no longer have to sort through thousands and thousands of irrelevant items to arrive at the one item that they are looking for and that aligns with their preferences. Rather, computer systems can now use datasets and algorithms which, by analyzing metrics like past shopping behavior and web page visitation among others, create a curated portfolio of product recommendations that are relevant to the shopper.

The system can then use the customer's response to this curated portfolio, such as which items most appeal to the customer and whether he or she makes a purchase, to inform the company's purchasing patterns and inventory levels. As a result, customers enjoy a more seamless shopping experience with fewer barriers to identifying a desired product, and the company can better manage its inventory and purchases to meet customer needs and be more profitable.

Artificial intelligence in action: marketing insights

A second way in which AI can be leveraged to better meet customer and company objectives is by tracking and analyzing a customer's continuously evolving priorities and interests. As Polar's Tom Fowler explains, *"Today's customer is incredibly fickle and easily influenced. This means that what was true yesterday or a week ago may not necessarily be true today, based on the influences that have hit that consumer."* With computer systems capturing these changes through datasets, algorithms and models, AI allows the content and advertisements that are presented to customers to be much more personalized and appropriate, resulting in a process ridden with less friction and fewer barriers to consumption for both the customer and the company.

The Digital Future

Digitization offers immense opportunity for companies to innovate, grow and differentiate themselves. However, this exciting and fast-paced digital change also poses an array of challenges and uncertainty, ushering in great change to organizational structure, traditional positions and roles, areas of investment, the processes of recruitment and retention, and the path to customer engagement. With these shifts and transitions at play, it has perhaps never been more important for C-suites and boards to lead with confidence and determination.

For this to be possible, organization leaders must delve into the digital tools available, explore their potential, and spearhead a digital strategy that touches every part and every person in an organization. While digital skills are important, personal characteristics and leadership traits remain critical for the C-suite and directors as well. Armed with natural curiosity, adaptability and the ability to inspire others, digital-savvy leaders can guide their organizations into this exciting digital world where opportunity abounds.

2017 Boyden Survey Methodology:

The 2017 Boyden survey referenced in this report was conducted by FTI Consulting at the direction of Boyden from March 20 to 24, 2017 among 1,232 American adults aged 18+. The survey was conducted online with a margin of error plus or minus 2.79 percentage points.

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