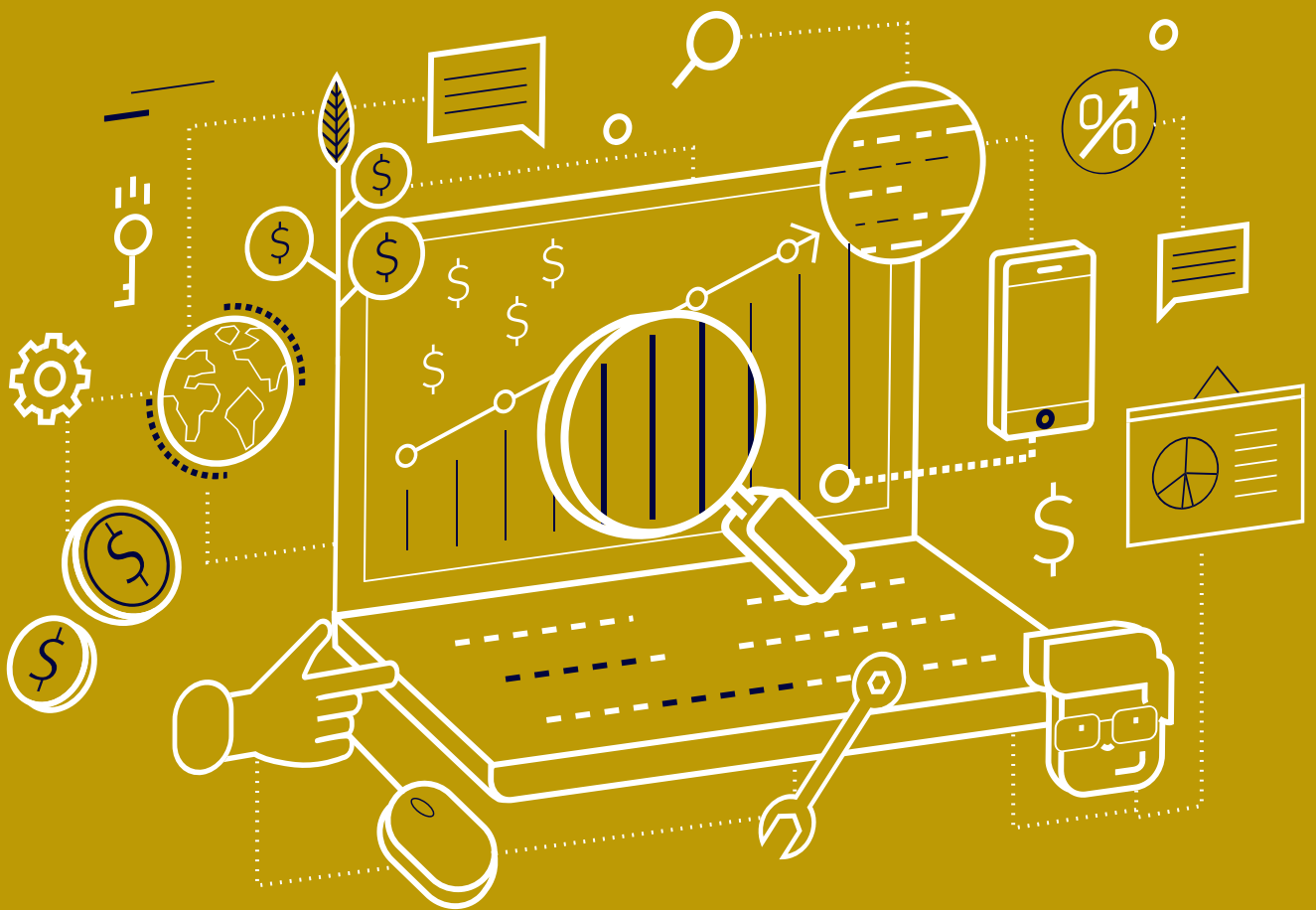# crfresearch

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DIGITAL DISRUPTION

EXPLORING THE IMPLICATIONS FOR LEADERS AND LEADERSHIP DEVELOPMENT

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April 2019

DIGITAL DISRUPTION
EXPLORING THE IMPLICATIONS FOR LEADERS AND LEADERSHIP DEVELOPMENT

Jay Conger and Gillian Pillans

CONTENTS

FOREWORD

Digital disruption is something we hear a lot about. Change is constant and unrelenting. Disruption is not a new phenomenon, but is accelerating ever faster. If you don't believe that is true, consider that it took just over 100 years from the launch of the Ford Model T for 1 billion cars to be travelling the world's roads, but sales of Apple's iPhone reached 1 billion globally within five years of launch.

HR has a key role to play in understanding the impact of this disruption and preparing businesses to respond appropriately. Considering who to recruit and develop and how to do it, fast, is becoming more pressing. In many organisations, it is also about working with the talent already within the business.

This CRF report indicates that the leadership capabilities organisations are looking for are changing. Characteristics such as learning agility, adaptability, and collaboration are becoming increasingly important and sought after. Companies are recognising that hiring for these is key, as leadership roles change and develop more quickly. Technology awareness is now expected.

The need to be connected, networked and agile are emerging as prerequisites to being effective as a leader. Understanding the business impact of this is essential. We see leaders have access to much more information. However, developing the skills required to use it effectively is a challenge in an accelerated world.

Our chances of developing effective leaders for the digital age will be much higher if we make good choices around who to invest in. How affiliative someone is and their sociability and interpersonal sensitivity will be strong predictors of their willingness to build and maintain strong alliances, and networks. Leaders may need to be supported in order to do this effectively. Being able to measure these characteristics can be a valuable advantage. Assessment and coaching can provide organisations and their leaders with the awareness of current strengths and the means to develop them.

This report clearly brings the capabilities of leaders into focus. Dealing with ambiguity while making decisions quickly and based on data; the ability to manage and empower a more distributed workforce are some of the essential skills identified. Interestingly, management still matters to ensure that planning, resource allocation and performance management are effective. These apparent contradictions need to be managed concurrently.

Pushing decision making down into the organisation is something that digitally mature companies are doing. This frees up more executive capacity however places new demands on those downstream. Their development matters too.

Learning is becoming more and more personalised and self-directed, and leadership development is becoming virtual. Coaching is being delivered on social platforms and that's making it more accessible. This makes it easier for global organisations to scale learning, but you have to be careful that moving away from skills-based to content-based training doesn't leave you with leaders who understand leadership intellectually but don't actually know how to do it in practice.

Chris Humphreys, Managing Director, Advanced People Strategies
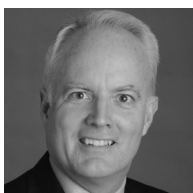
ABOUT THE AUTHORS

Jay Conger

Jay is one of the world's experts on leadership development and talent management. He is the Henry Kravis Chaired Professor of Leadership Studies at Claremont McKenna College in California. He is also a senior research scientist at the Center for Effective Organizations (CEO) at the University of Southern California. Author of 15 books on leadership, his most recent is entitled *The High Potential's Advantage*.

Gillian Pillans

Gillian has worked as a senior HR practitioner and OD specialist for several organisations including Swiss Re, Vodafone and BAA. Prior to her HR career, she was a management consultant with Deloitte Consulting and is also a qualified solicitor. Gillian has written various CRF reports on subjects including HR strategy, organisation design and development, leadership development, talent management, coaching and diversity.

ACKNOWLEDGEMENTS

ABOUT CRF

Our purpose is to increase the effectiveness of the HR function, in order to drive sustained organisational performance, through developing the capability of HR professionals. With a network of over 200 leading organisations, we continue to grow as the respected focal point and knowledge source for improving corporate and individual performance.

We inform, discuss and guide our members on how to enhance their personal capability, those of their colleagues and, in turn, the effectiveness of the function.

We explore topics through an **evidence-based lens.** This leads us to critique existing practices with an ambition and desire to progress the influence and impact the function delivers to the business. Our approach is professionally and informally rooted in the principle that **adults learn through doing, discussion, reflection and interaction with others.**

What CRF stands for

- We are alert to the political, economic, technological and social environment in which businesses operate, the continuous uncertainty and potential for game-changing events.

- We understand organisations, the imperatives of robust strategy, agility in implementation and persistence in seeking operational excellence.

- We are acutely aware of the role of people in organisations, the relationship between them, and the systems and processes which bind them together.

For more details on how your organisation can benefit from CRF membership please contact Richard Hargreaves, Commercial Director, on +44 (0) 20 3457 2640 or at richard@crforum.co.uk. Alternatively, please visit our website at www.crforum.co.uk.

EXECUTIVE SUMMARY
DEFINING THE KEY THEMES

1

THE DAWN OF THE DIGITAL AGE

We live in an era of unprecedented business change and complexity.

The last three decades have seen a rapid shift towards an interconnected economy based on the convergence of multiple technology innovations enabled by connectivity and data. Businesses across industry sectors are facing disruption from emerging competitors and new business models.

We have to adapt to the digital age.

BUILD CAPACITY FOR FAST INNOVATION

To succeed in this new economy, organisations are having to build the capacity for fast innovation underpinned by:

- Agility to anticipate changing market conditions and adjust quickly
- Rapid decision-making
- Collaborative team-working
- A culture of curiosity, experimentation and learning
- A tolerance for risk
- The ability to articulate a pragmatic vision and translate it into meaningful performance measures.

2

> "The best swordsman in the world doesn't need to fear the second-best swordsman in the world; no, the person for him to be afraid of is some ignorant antagonist who has never had a sword in his hand before; he doesn't do the thing he ought to do, and so the expert isn't prepared for him."
>
> Mark Twain, 1889

57%

said the digital economy had led to **fairly extensive or fundamental changes** in their business model, strategy or competitive landscape

87%

expect further change

3

THE IMPACT OF DIGITAL IS REAL

The impact of digital is being strongly experienced by CRF member organisations.

Over half (57%) of respondents to our survey said the digital economy had led to fairly extensive or fundamental changes in their business model, strategy or competitive landscape, and 87% expect to experience further change.

4 **LEADING A VIRTUAL WORKFORCE**

Digital is also changing the way work gets done. Leaders need to be adept at handling social media and leading global teams virtually, and need to pay attention to the risks for themselves and their teams of being 'always-on'.

LEADERSHIP IN THE DIGITAL AGE: ADAPTING TO THE NEW CONTEXT

Our purpose in this report is to explore the implications of the digital age for leadership and leadership development.

5

We seek to understand in what ways the demands of leaders are changing, how our models of leadership need to evolve, and what that means for leadership development.

Our conclusion is that, while the fundamentals of good leadership – such as being an effective strategist or good communicator – remain constant, leadership has to adapt to the context within which it is exercised.
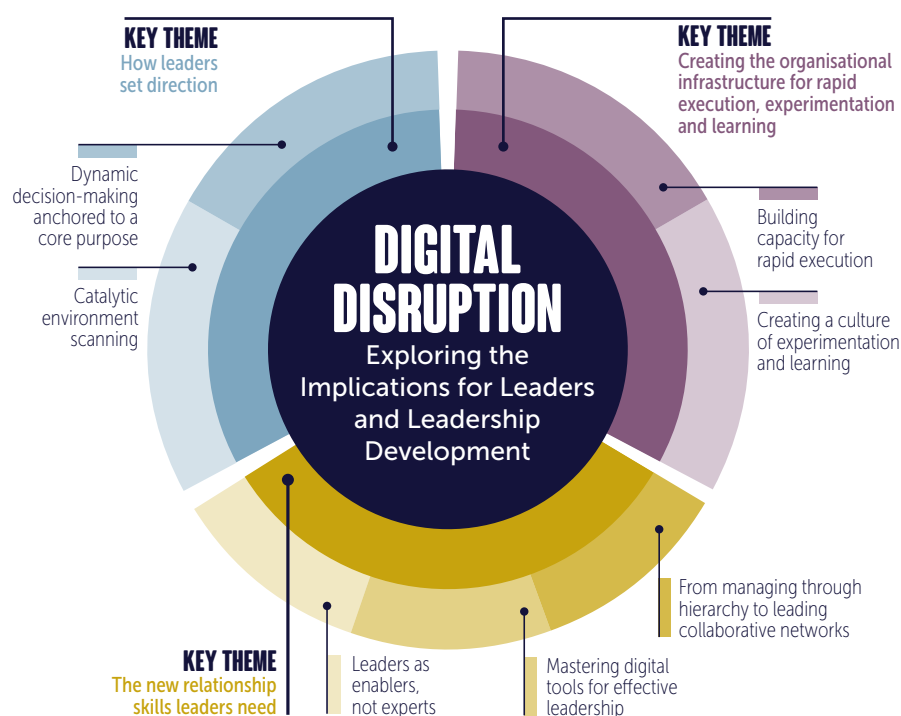
The demands of the digital era require leaders to place greater emphasis on behaviours such as adaptability, uniting people around a shared purpose, and creating a culture of empowerment and experimentation. Leaders also need to develop competence in using technology to foster relationships and make data-driven decisions.

THE DIGITAL DISRUPTION LEADERSHIP MODEL

We identified seven principal shifts in leadership, organised around three key dimensions: how leaders set direction; the organisational infrastructure they need to build; and the new relationship skillsets required.

6

- **Dynamic decision-making anchored to a core purpose.** Leaders need to keep their organisations focused on a consistent vision and purpose while being adaptable in the short term.
- **Catalytic environment scanning.** The ability to horizon scan, detect patterns and develop insights will be essential to remain competitive.
- **Build capacity for rapid execution.** Leaders not only have to detect market changes, they have to respond fast to emerging competitive threats and shifting customer expectations by building agility into processes for decision-making and execution.
- **Create a culture of experimentation and learning.** Innovation requires a higher tolerance for risk, and to build mechanisms for learning from failure.
- **From managing through hierarchy to leading collaborative networks.** Increasingly, work in the digital economy is done through collaborative networks that cross organisational silos and often include contributors from outside the organisation.
- **Mastering digital tools for leadership effectiveness.** Leaders have to get comfortable with using digital communications tools to build trust, and engage and motivate their teams.
- **Leaders as enablers of experts.** The work of leadership, particularly in knowledge-driven work, is shifting away from telling others what to do to developing a context where others can bring their expertise, make good decisions and do their best work.

KEY THEME
How leaders set direction

Dynamic decision-making anchored to a core purpose

Catalytic environment scanning

KEY THEME
Creating the organisational infrastructure for rapid execution, experimentation and learning

Building capacity for rapid execution

Creating a culture of experimentation and learning

DIGITAL DISRUPTION
Exploring the Implications for Leaders and Leadership Development

From managing through hierarchy to leading collaborative networks

KEY THEME
The new relationship skills leaders need

Leaders as enablers, not experts

Mastering digital tools for effective leadership

7 ADAPTING LEADERSHIP DEVELOPMENT FOR THE DIGITAL AGE

Leadership development also has to adapt to meet the needs of leaders in the digital age, both in terms of how we use digital learning tools, and more importantly to build the new leadership capabilities.

So far, we find that efforts have tended to focus on developing leaders' awareness of the potential impact of digital on their businesses, or building technical skills. More fundamental behaviour change – helping leaders develop their personal capacity to handle complexity, and adapt their leadership style to suit different business contexts – requires deeper commitment both from the organisation and the individual.
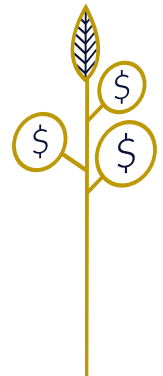
> More fundamental behaviour change requires deeper commitment both from the organisation and the individual.

> Being clear about the business outcomes we expect from leadership development is essential.

8 BUILDING ON THE FOUNDATIONS OF ADULT LEARNING

Leadership development needs to keep pace with the evolving demands of leadership, but also needs to be founded on fundamental principles of adult learning.

Being clear about the business outcomes we expect from leadership development, minimising the gap between learning and practice, creating experiences that reinforce learning, and paying attention to the context in which leaders are expected to put their learning into action, are all essential.
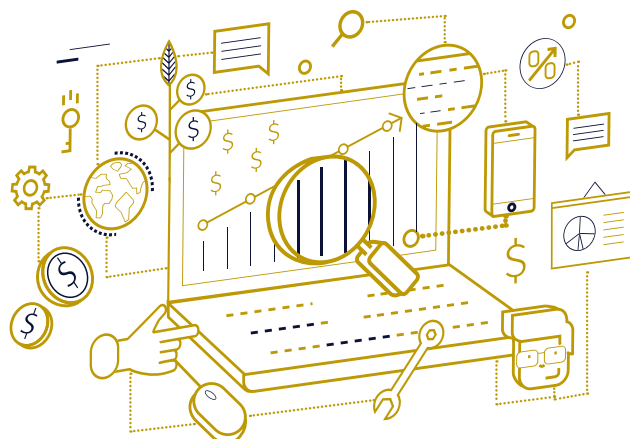
01

INTRODUCTION

In this chapter we describe the current context for organisations, characterised by an accelerating pace of change, emerging threats and opportunities, and digital disruption. We explore the capabilities organisations need to develop for success in this context, and frame our research around leadership in the digital age.
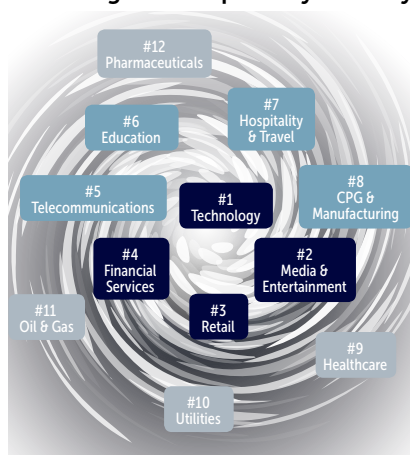
TOPICS COVERED

1.1
WELCOME TO THE DIGITAL AGE

FIGURE 1

The Digital Vortex: Digital Disruption by Industry

Source: Loucks, Macauley, Noronha and Wade, 2016

"Digital business ... goes to the heart of what you make and serve to your customers. It redefines some of your core competencies and what you are in business to do. It could even end up placing you in a new industry – possibly one that never existed before."

Raskino *et al,* 2015

The digital age is upon us. Over the past three decades we have seen a rapid shift towards an interconnected economy based on information technology. A decade ago only one of the top ten companies globally by market capitalisation was a technology company. Today seven out of the top ten are.

Nevertheless, fundamental – and sometimes cataclysmic – change is not new. Between 1347 and 1351, the Black Death wiped out between 30% and 50% of Europe's population. Throughout history, previously successful companies and industries have come and gone: in today's prices, the Dutch East India Company at its peak in 1637 would have been worth several times more than Apple, Microsoft, Alibaba and Facebook combined. Disruption – whether of the digital variety or not – has been a feature of human society throughout its history. What is different today, however, is a convergence of technological, economic, geopolitical and societal factors, which together are changing the global competitive landscape at a pace never seen before.

We would highlight four particular elements that combine to drive unprecedented change in the business context.

1. **Accelerating speed of change.** It took just over 100 years from the launch of the Ford Model T for 1 billion cars to be travelling the world's roads, but sales of Apple's iPhone reached 1 billion globally within five years of launch. Facebook was the eighth most valuable company in the world in 2018, having only been formed in 2004.

2. **Insurgents reshaping industry boundaries.** Companies do not just need to pay attention to competition from industry peers – they need to be prepared for new entrants who rewrite the rules of their sector. As Tom Goodwin, author of *Digital Darwinism,* points out: "Uber, the world's largest taxi company, owns no vehicles. Facebook, the world's most popular media owner, creates no content. Alibaba, the most valuable retailer, has no inventory. And Airbnb, the world's largest accommodation provider, owns no real estate."

3. **The scope and scale of disruption.** Although not all industries are affected to the same degree, very few organisations are completely insulated from the emergence of digital technology. For some, the opportunities lie in digitising internal processes, reaching customers in different ways, or digitising the supply chain. For others, the impact is more fundamental: entirely reshaping the business model or purpose of the organisation. Professor Mike Wade, who runs the Global Center for Digital Business Transformation, an IMD and Cisco Initiative, has co-written a book – *Digital Vortex: How Today's Market Leaders Can Beat Disruptive Competitors at Their Own Game* – which sets out the Center's research findings. Wade and colleagues describe a digital vortex, which ranks different industries according to the degree of disruption they face. See Figure 1. The closer they are to the centre of the vortex, the higher the degree of disruption they face.

In some cases, industry leaders are overtaken by 'blitzscaling' – a term coined by Reid Hoffman, co-founder of LinkedIn. The new competitor prioritises speed over managerial efficiency in its development. For example, Facebook began as a blitzscaling story. The year-over-year revenue growth during its first few years of existence was 2,150 percent, 433 percent, and 219 percent, going from zero to $153 million in revenue in 2007. Digitalisation can permit these astounding growth rates with the right business model and access to markets.

> "We tend to overestimate the effect of a technology in the short run and underestimate the effect in the long run."
>
> Roy Amara, past president of The Institute for the Future

4. **Digital activism.** In 2015, a massive online petition directed at the CEO of Delta Air Lines and signed by nearly 400,000 people led the company to refuse to transport exotic animal hunting trophies. The catalyst was a global news story about an American dentist who had illegally killed a famous lion in Zimbabwe named Cecil, and wanted to ship it home.

In summary, the traditional advantages enjoyed by large, global organisations – economies of scale, global reach, ownership of assets, large workforces etc. – are becoming less valuable, and may even create inertia in the system that makes change harder.

According to Wade, the digitisation of products, services, and business processes means digital disruptors can deliver the same – or even greater – value than a traditional competitor, without having to create the traditional value chain. "This is the fundamental objective of digital disruptors: to provide superior value to the end customer while avoiding the capital investments, regulatory requirements, and other such impediments of 'encumbered incumbents'". Look no further than China's Xiaomi which crowdsources features of its new mobile phones rather than investing heavily in R&D, and Telstra which crowdsources customer service, so that users support each other to resolve problems free of charge.

Digital dynamics are undermining barriers to entry. For example, web-based service providers in insurance can access markets without having to build distribution networks of offices and local agents. Web powerhouses like Google can test industry boundaries through products such as Google Wallet. Airbnb and HomeAway can compete against the hotel industry without investing in properties.

To succeed in this new economy, organisations are having to build the capacity for fast innovation underpinned by:

- Agility: the ability to anticipate changing market conditions and adjust quickly.
- Rapid decision making and prototyping through collaborative team working.
- A culture of curiosity, experimentation and learning.
- A tolerance for risk.
- Pragmatic vision and the skill to devise corresponding objectives, boundary parameters, key results and metrics that matter.

Leaders need to both develop these capabilities themselves, and foster them within their organisation.

> "Agility ... is the single most important weapon in the arsenal of organisations competing in an increasingly digital world. ... When you possess strong agility, you can adjust quickly to changing market conditions and anticipate these changes to your advantage."
>
> Loucks, Macauley, Noronha and Wade, 2016

THE WAY WORK GETS DONE HAS CHANGED

As well as changing the strategic context for organisations, digital is also fundamentally changing the way work gets done, which also has implications for leadership. Social media is now a critical communications channel for senior leaders, whether as a public relations tool for CEOs to build internal and external personas, as a way of communicating corporate strategy, or for potential employees or investors to uncover the 'real story' of what's going on inside the organisation, via platforms such as Glassdoor, or as a tool for customers and activists to voice their opinions in the 'public square'.

In addition, digital tools allow for virtual communications, greater transparency and access to feedback, and collaboration across large distances and time zones. This is leading to different team structures – for example greater use of cross-functional teams – and different working patterns, such as remote working and shared leadership. The downsides of this are information overload, the potential for 'micro-managing' and expectations of being 'always-on', things that leaders must manage both for themselves and their teams.

> "What's behind the changing expectations we have of leaders is not just about being a digital business, it is about what we believe that the next generation will need and expect from their leaders in the future."

Michaela Krantz, Programme Manager Leadership Development, Spotify

WHAT DO WE MEAN BY DIGITAL?

Loucks, Macauley, Noronha and Wade, authors of *Digital Vortex*, define digital as: "the convergence of multiple technology innovations enabled by connectivity."

The specific innovations evolve over time, but today would include: big data and analytics; cloud computing and other platform technologies; mobility solutions and location-based services; social media and other collaborative applications; connected devices and the Internet of Things (IoT); artificial intelligence (AI) and machine learning; and virtual reality.

Digital disruption is defined as: "the effect of digital technologies and business models on a company's current value proposition and resulting market position. Although digital disruption need not be negative, it's often cast in this light. [However,] digital disruption can illuminate opportunities as well as threats."
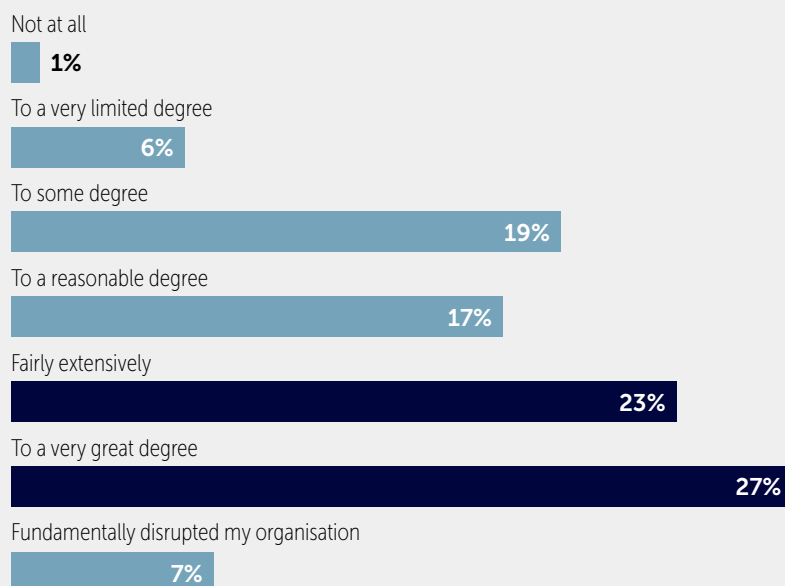
1.2
CRF SURVEY RESULTS – BUSINESS IMPACT OF DIGITAL

> "Digital is leading to a fundamental reframing of customer expectations in our world. Customers don't compare us with other financial companies; they expect to have the same quality of digital experience with us as they would get from a best-in-class digital business. We have to benchmark ourselves against the best digital players, not only those in the financial industry."

Simon Linares, Group HR Director, Direct Line Group

Our survey explored the impact of the digital economy on CRF member organisations. Over half (57%) of respondents said the digital economy had led to fairly extensive or fundamental changes in their business model, strategy or competitive landscape. See Figure 2.

FIGURE 2

To what degree has the rise of the digital economy so far led to changes in your organisation's business model, strategy and competitive landscape?

Not at all
1%

To a very limited degree
6%

To some degree
19%

To a reasonable degree
17%

Fairly extensively
23%

To a very great degree
27%

Fundamentally disrupted my organisation
7%

N=114

87%

anticipate the **digital economy will fundamentally or fairly extensively disrupt** their industry in the future

Looking ahead, a larger proportion of respondents expected further change, with 87% anticipating fairly extensive or fundamental business change resulting from the rise of digital.

Drilling down, we asked respondents to itemise the ways in which digital technology had significantly impacted their organisation to date. The most significant impact came from changes to the ways they engage with customers through digital channels (cited by 86%); digitising products and services (75%); the use of analytics for customer insight (73%); and digitising internal management and work processes (69%). Only 4% of companies considered themselves to be 'digital natives', i.e. end-to-end digital businesses from their inception. See Figure 3.

FIGURE 3

In what ways has the rise of digital technologies had a significant impact on your organisation to date?

Changing the ways we engage with customers, e.g. digital marketing and social media
86%

Digitising products and services
75%

Provision of customer/consumer insights and analytics
73%

Digitising internal management and work processes
69%

Building e-commerce channels or other digital business platforms
46%

Moving from a product- to a solution-driven business model
46%

Digitising the supply chain or other manufacturing or operational processes
42%

Other
9%

We were set up as an end-to-end digital business
4%

N=114

1.3
LEADERSHIP IN THE DIGITAL AGE

"Our data show that the leadership capabilities organisations are looking for are changing. Characteristics such as learning agility, adaptability, and collaboration are becoming increasingly important and sought after. Companies are recognising that hiring for adaptability is key, as the role you hire for today may look substantially different in two years' time."

Chris Humphreys, CEO, APS,
Hogan Assessments Distributor UK

The purpose of this report is to explore the implications of the Digital Age specifically for leadership, and leadership development. We have sought to answer the following questions:

- How is the context changing within which leaders have to lead?
- Are the demands of leaders different in the Digital Age? In what ways are they evolving?
- Are our models of leadership delivering what's needed?
- Are current methods of developing leaders fit for purpose in this context, and if not, what needs to change?

Our research has included interviewing over 50 leaders, leadership experts and leadership development practitioners. We also conducted a survey of CRF and CEO members, and an extensive literature review.

In summary, we found the following.

- Although the field of leadership has been extensively researched over many years, thinking around the implications of the digital age for leaders is in its infancy. For example, as Figure 4 below shows, while nearly three-quarters of survey respondents have a leadership competency framework, only just over one-quarter (27%) have updated it to reflect the requirements of leaders in a digital context, and only 17% have a clear definition or framework that describes how the demands of leaders are likely to be different in the digital economy.

- While many leadership experts, business schools and consultancies are publishing and marketing digital leadership models and digital leadership development programmes, so far there has been little scientific validation of these models. In numerous cases, there is striking overlap with the prior generation of leadership competencies leading many to question the validity of the new frameworks. Are they simply reinventing older models?

FIGURE 4

Does your organisation have a defined set of published leadership standards or competencies?   N=110

73%	26%

Have your leadership standards/competencies been updated to reflect the requirements of leadership in a digital context?   N=110

27%	6%	67%

Does your organisation have a clear definition and/or framework of how the demands of its leaders are likely to be different in the digital economy? N=110
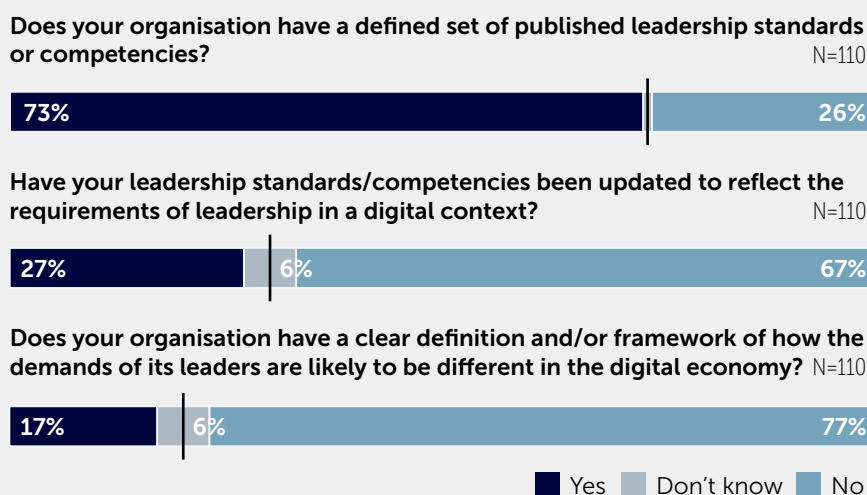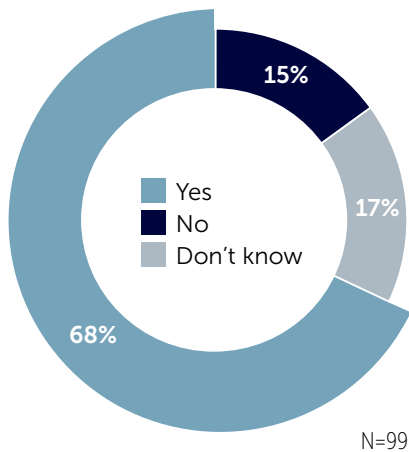
17%	6%	77%

■ Yes   ■ Don't know   ■ No

Do you anticipate updating your leadership models or competencies over the next two years, to reflect the changing requirements of leaders in the digital economy?

15%

No

17%

Don't know

68%

Yes

Yes
No
Don't know

N=99

- There is a great deal of interest in organisations about the impact of digital on leadership and leadership development. For example, over two-thirds of respondents to our survey (68%) anticipate updating their leadership competency models over the next two years to reflect the changing requirements of the digital economy. See Figure 5.

- Leadership needs to adapt to meet the challenges of the evolving context. However, the core tenets of effective leadership remain essentially the same. It is more a case of placing greater emphasis on some behaviours and doing less of other things, than fundamentally rethinking the purpose and capabilities required of leaders today and into the future.

Our intention here is not to review the entire field of leadership, but rather to focus on the ways our research suggests the role and expectations of leaders are changing, which we summarise in Chapter 2. In Chapter 3 we review the implications for leadership development, including a summary of what makes for effective leadership development today. For a fuller discussion of the evolution of leadership and leadership development, see CRF's 2015 report, *Leadership Development: Is It Fit for Purpose?*

02

WHAT'S DIFFERENT ABOUT LEADERSHIP IN THE DIGITAL AGE?

In this chapter we explore to what degree the role and expectations of leaders is changing in the digital age. We describe seven essential ways in which we see these changes playing out.

TOPICS COVERED

2.1
IS LEADERSHIP FUNDAMENTALLY DIFFERENT IN THE DIGITAL AGE?

"We don't want to throw the leadership baby out with the bathwater. The things that are key to being a good leader, such as being able to build trust, to influence and motivate people, to be courageous and so on; those haven't changed."

Professor Jennifer Jordan, IMD

The short answer is 'no'. We still need leaders who are effective strategists, good communicators who can unite people around a common vision, with strong people skills, deep self-awareness, and so on. While it's tempting to get caught up in the novelty of 'leadership in the digital age', in essence the fundamentals of leadership remain constant. You can't assume that all the things that mattered in the past no longer count. For example, research continues to show that face-to-face communication remains superior to email and texting for engagement and exploration of issues.

However, leadership has to respond to the context within which it is exercised. Tomas Chamorro-Premuzic, Michael Wade and Jennifer Jordan, in a 2018 paper on the impact of AI on leadership, state: "Leadership evolved through thousands of years, so its foundations are unlikely to change. On the other hand, one cannot deny the potent influence that environmental changes may have in reshaping the critical skills and behaviours that will make leaders effective."

For example, in a context where artificial intelligence (AI) is taking over routine tasks, and the rise in virtual and remote working means leaders have to find new ways of building and maintaining trust, Chamorro-Premuzic *et al* conclude that the 'soft' elements of leadership – the traits and behaviours that enable leaders to help others achieve a common goal or shared purpose – will become even more important. "Certain qualities, such as deep domain expertise, decisiveness, authority and short-term task focus, are losing their cachet, while others, such as humility, adaptability, vision and constant engagement, are likely to play a key role in more agile types of leadership," they say.

You could draw a parallel with the impact of technology on the world of sport. Thanks to modern materials, tennis racquets have become lighter and lighter, and the size of the racquet head has grown by 50%. As a result, players are able to swing the racquet faster than ever before, generating high ball speeds with great top-spin. Since faster shots are less likely to be returned than slower shots, the modern tennis game is all about taking response time away from your opponent. By contrast, soft touches and controlled volleys characterised the game in the age of wooden racquets. The pace of the whole game was much slower. While the 'touch game' still plays a role, no player nowadays can rely on it as their main game strategy. And the faster pace of modern tennis means strength, fitness and mobility have become much more important. So while the rules and the physical courts remain the same, the actual methods for winning have changed. Digital technologies, like modern tennis racquets, are causing organisational leaders to evolve how they play their game.

The need to respond at speed to changes in a highly complex operating system is also driving leaders to rethink how work gets done. According to Professor Jennifer Jordan, who specialises in digital leadership at IMD, this change in context requires a shift in mindset for many leaders: "Most people are used to a linear way of working with approval processes and buy-in necessary along each step of the process. Now it's about agile working – work in sprints, measure the outcome, pivot and try all over again." In many ways, leaders will have to cultivate the skills

"The only sustainable advantage you can have over others is agility, that's it. Because nothing else is sustainable, everything else you create, somebody else will replicate."

Jeff Bezos, Founder and CEO, Amazon

long associated with outstanding entrepreneurs who leverage fast learning and response times with an experimental mindset. As Garvey Berger and Johnston note, this entrepreneurial agility requires leaders to develop specific habits of mind which are quite different from the past. These include learning to take multiple perspectives on a problem, asking more profound questions and seeing problems in all their complexity.

The volatility and complexity in markets is pushing decision-making and leadership further down in organisations while moving leadership from individuals to collectives. As Felin and Powell argue, 'polyarchy' is in. Borrowed from the world of political science, the term refers to a system of government where power is widely distributed across many individuals. Most importantly, power is given to those closest to the action. Organisations today must promote specialists and teams that have the autonomy to solve problems and capture opportunities, while minimising bureaucratic demands and interference. The old approaches to designing organisations – hierarchy with clear lines of authority, delineated functions and formal, long-range planning systems – simply can no longer facilitate the requisite agility. As a matter of fact, they undermine it. Leadership that is more entrepreneurial will increasingly be the norm.

It is not just digital technology that is reshaping the context for leaders: the expectations of the workforce are also changing. According to Michaela Krantz, Programme Manager, Leadership Development at Spotify, it is these changing preferences, not just the emergence of digital business models, that are having a greater impact on leadership. "Finding meaning in their job is a priority for people today, and they want to perceive the meaning and purpose in what the company does. Leaders need to respond to that."

CRF SURVEY RESULTS

Our survey showed that CRF members on the whole think the capabilities required of leaders in the digital age differ in important and significant ways to historic expectations. Just over two-thirds (69%) thought they would be either more different than similar, or fundamentally different to today's requirements. See Figure 6. Respondents also thought the impact would be widespread, not just limited to a small minority of leaders. Just over half (57%) thought that changes in leadership capabilities would affect all leaders, and a further one-third (32%) considered the majority of leaders would be affected.

57%

thought that changes in leadership capabilities would **affect all leaders**

32%

considered the **majority of leaders** would be affected

FIGURE 6

To what extent do you think the capabilities required of leaders in the digital age are different in important ways to existing or historic leadership competencies in your organisation?

Different

69%

Similar

30%

Don't Know

1%
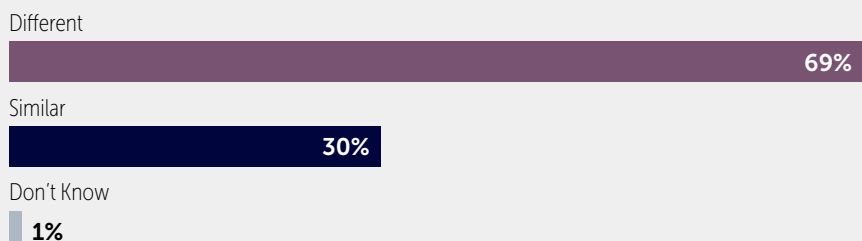
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"In some industries, digitisation is eliminating traditional competitors and replacing them with completely new ones. As a digital leader you have to be ready to recognise that the threats to your business can come from unexpected places, and you have to be ready to respond."

Brian Holliday, Managing Director, Digital Factory, Siemens plc

Drilling down, we asked survey respondents to describe what tangible differences they see in the traits and qualities required of leaders in the digital age. Text analysis showed the following, in descending order of priority.

- Ability to make decisions quickly, especially in the face of uncertainty and ambiguity.
- Agility and adaptability.
- Strong data analytics and data-based decision-making.
- Ability to manage and empower a more distributed and remote workforce.
- Technology-savvy and interested in new digital platforms.
- Innovative and forward-thinking.
- Ability to communicate with employees effectively and build trust, especially in the face of new technology and working patterns.
- Openness to risk.

There is another important factor that is missing here. More than ever, today leaders have to be open to the world outside their organisation. Leaders have to be inquisitive, well-networked, and savvy about technology, digital communications and the impact of AI at work.

LEADERSHIP MATTERS – BUT MANAGEMENT HASN'T GONE AWAY

Although this study focuses on leadership in the digital age, we need to be careful not to lose sight of the important role of management. While tasks we might describe as 'leadership' – such as setting vision, creating a culture of innovation and inspiring others – are all the more important in a context of digital disruption, so too are critical management skills such as planning, resource allocation and managing performance.

Indeed, when Google's Project Oxygen conducted a large scale data analysis of the characteristics that distinguished successful leaders from poorer performers, the results included many elements that have defined effective management through the ages, such as being a good coach, being productive and results-oriented, listening, and helping team members with career development.

Many of the growing digital businesses we spoke to report that their greatest leadership challenges are about introducing professional management without losing sight of what made them successful in the first place. As one of our interviewees said: "The digital business model or capacity for innovation might be highly evolved, but you also need to develop sophisticated leadership and management capability. You need grown-ups in the room." Whereas larger, established businesses are introducing digital leadership programmes, many digital businesses are launching foundational management skills programmes. They recognise that leaders are often in that position because they have been promoted out of individual contributor roles as the business has grown, and they have not had the support to accumulate the necessary management skills.

Ahmed Sidky of Riot Games said: "When you're in start-up mode, people are highly driven and focused on the product and the customer, and you just work it out. Once you reach scale, you have to rebalance and invest in people management skills. You have to become more professionally managed without becoming bureaucratic or losing sight of the things that drove your success in the first place."

Technology-driven businesses in particular are also recognising the need to promote diversity and inclusion, and create an inclusive culture. For example, Spotify's leadership criteria – used for leader selection and development – emphasise the importance of building trust, valuing different perspectives and adopting an inclusive leadership style.
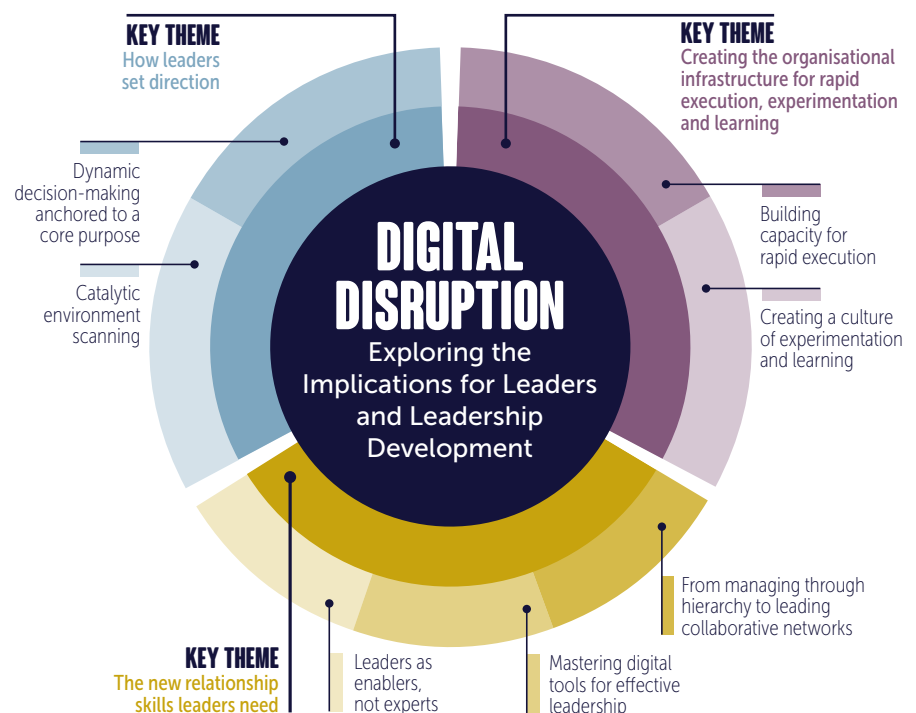
2.2
IN WHAT SPECIFIC WAYS ARE THE EXPECTATIONS OF LEADERSHIP CHANGING?

While we broadly conclude that the core tenets of leadership are not about to be rewritten for the digital age, when we look in more detail at *what* leaders are required to do, and *how* they need to operate, there are notable differences. Overall, if we imagine leadership on a continuum from tightly controlled and hierarchical to loose, empowering and entrepreneurial, the needle is shifting from left to right. As leaders have to react quickly to emerging digital competitors, and spot opportunities for opening up new lines of business, the need for entrepreneurialism within organisations ('intrapreneurialism') is becoming more dominant.

However, the degree to which these changes apply to different organisations depends on factors such as the nature of the company and its work processes, the degree of disruption in its industry, the level of seniority of the leader, their proximity to customers or involvement in product development, and the degree of interdependence demanded between functions and geographies. For example, one global consumer packaged goods business we interviewed, which had conducted extensive internal research on digital leadership, concluded that although job content had changed for some people, there was little real difference between their core leadership model and digital leadership. The more volatile the industry in which you operate, the more essential it is that your leaders build the capability to anticipate and adapt to the shifting competitive landscape. Felin and

FIGURE 7

KEY THEME
How leaders set direction

KEY THEME
Creating the organisational infrastructure for rapid execution, experimentation and learning

Dynamic decision-making anchored to a core purpose

Catalytic environment scanning

Building capacity for rapid execution

Creating a culture of experimentation and learning

DIGITAL DISRUPTION
Exploring the Implications for Leaders and Leadership Development

KEY THEME
The new relationship skills leaders need

Leaders as enablers, not experts

Mastering digital tools for effective leadership

From managing through hierarchy to leading collaborative networks

> "Leaders have to become masters at dealing with the paradox of managing for today's business model and tomorrow's future revenue sources."
>
> Lisa Lyons, Principal, Leadership and Assessment Market Lead, Mercer

Powell state: "Success in volatile industries requires something more than baseline capabilities: namely, adaptive processes and structures that enable companies to change their baseline capabilities, anticipate shifts in market demand, develop and integrate new technologies, learn from market events, and foresee and capture new market opportunities."

As Figure 7 shows, we identified three key shifts, arranged around three organising dimensions.

1. **How leaders set direction:** from detailed top-down planning to scanning, envisioning and course-correcting.
2. **The organisational infrastructure leaders need to build:** the tools, metrics, processes and underlying culture that enable experimentation, continual feedback and rapid execution.
3. **The new relationship skillsets required:** leading through networks and influence rather than expertise, and leveraging digital communication tools to lead virtual teams.

We are not suggesting that these capabilities have previously been unimportant, but our conclusion is that the digital business context makes them even more necessary.

RESULTS OF MIT SURVEY

A 2018 study by *MIT Sloan Management Review* (Kane *et al;* see references), including a survey of over 4,000 executives across 123 countries and 28 industries, reached a number of conclusions that are consistent with our findings.

- Over half of respondents (53%) agreed or strongly agreed that digital transformation was a top management priority for their organisation.

- The main difference between working in a digital environment versus a traditional one was the faster pace of business/rate of change.

- Digital business requires organisations to adopt an operating model that is faster, more flexible and distributed, and has a different culture and mindset than traditional business.

- More digitally mature companies push decision-making authority further down into the organisation in order to improve the capacity for execution in the digital environment. Digitally mature companies are also more likely to operate cross-functional teams.

- Digitally mature organisations are more likely to experiment and iterate, and use the results of these experiments to drive change across the organisation. Experimentation and iteration is one of the key ways organisations are choosing to respond to digital disruption.

- Adopting a mindset of experimentation has to be accompanied by an increased tolerance of failure. Lack of experimentation is seen as the biggest challenge to a company's ability to compete in a digital environment.

- The required cultural shift is not always well received: leaders have to be prepared to deal with tensions arising from employees who are incapable or reluctant to change their mindset or working practices.

"As strategy has transformed from long-term linear planning to more agile movements with a common focus, so keeping the vision 'true' whilst adapting in the short-term has become a critical competency for leaders."

Neubauer, Tarling and Wade, 2017

"Purpose now plays an ever more critical role in determining whether talented people will join your organisation, and whether they choose to stay."

Ravi Bhusate, Global Head of Leadership and Management Practice, BTS

1. HOW LEADERS SET DIRECTION

Traditional processes for determining strategic direction – typically top-down, hierarchical, multi-year and formulaic – are becoming outdated, as they are incapable of responding with the speed and flexibility of decision-making required in the digital age. Leaders need more dynamic ways of identifying and evaluating strategic opportunities, and developing timely responses that meet market needs.

A. Dynamic decision-making anchored to a core purpose

When change is continuous and rapid, leaders have to manage a polarity: on the one hand they need a clear, consistent sense of vision and purpose, and on the other they need to reorient the organisation rapidly to respond to emerging threats and opportunities.

As we discuss further below, the pace of response required to handle digital disruption is leading to more distributed and autonomous decision-making. To avoid chaos, leaders need to draw a broad strategic outline that provides a framework for individuals to evaluate decisions against the broader organisation purpose. It is therefore all the more important for leaders to have a clearly defined and articulated 'North Star' that guides the organisation's or the project team's direction. As Jeff Bezos, CEO of Amazon, has famously said: "We're stubborn on vision and flexible on details."

The idea of having a clear vision and purpose is not new. But what has become more essential in the digital age is for leaders to create clarity around the *limits* of the vision. The culture of experimentation that's required for innovation runs the risk of meandering. The more decision-making is devolved, the more people need a way of evaluating ideas against the core organisational vision. Leaders need to articulate a vision but also set some guardrails that establish discipline.

For example, at W L Gore, innovation is based on the company's founding technology – the PTFE polymer. This has led the business into disparate markets, including medical devices, clothing and pharmaceuticals, but they are all based on the same underlying technology. One of Gore's four founding principles, which is instilled in all its associates, is the concept of 'waterline'. Using the metaphor of a boat, associates are encouraged to experiment, but to exercise judgement. Associates undertaking any experiment that has the potential to hit the company below the 'waterline' and therefore to sink the 'boat', have to check with colleagues before proceeding. Gore also has a simple framework for judging whether an innovation should be pursued, called Real-Win-Work. This involves answering three simple questions honestly: Is the opportunity real? Can we win in this market? Will it work?

B. Catalytic environment scanning

As the speed of change accelerates, so too does the need to grow organisational capacity to scan for weak market signals, identify patterns and develop insights. The executive team needs good data in order to choose which options to pursue and how to allocate resources. What's different here, according to Stu Winby, CEO of Spring Networks, who lives and works in Silicon Valley and helps organisations develop adaptive responses to change, is that this needs to be an ongoing activity, not just something that's done every few years: "Traditionally, horizon scanning and strategy resetting would have been a much less frequent activity than it needs to be now," he said. Goodwin argues that, as the pace of change increases, leaders need to be disciplined about looking further ahead: "The need to look ahead has never been greater. When you drive a car … it seems sensible that the faster you are travelling, the further ahead you need to look."

Using data analytics to understand customer behaviour, sentiment analysis on social media, and analysing customer reviews and feedback, are all tools senior leaders need to learn to tap into to understand customer needs and perceptions of the company.

> **"Organisations are disappearing at increasing rates because they are failing to adapt to the increasing complexity of the economic ecosystem. To survive digital Darwinism, organisations must maintain a perpetual state of readiness to respond to the unexpected."**
>
> Professor Tony O'Driscoll, Duke University

Leaders also need to build the capability for horizon scanning so that it is distributed throughout the organisation. This might mean the following.

- Having flatter structures, with fewer layers, minimal hierarchy and broader spans of control, so messages about market changes can get to decision-makers more quickly.

- Designing the organisation to have 'maximum surface area' with the external environment, customers and other stakeholders such as regulators. For example, games company Valve is an example of a company that uses forms of open innovation to invite customers into the company's innovation and learning processes, and to engage with external stakeholders through crowdsourcing. Similarly, W L Gore makes deliberate attempts to reduce boundaries, so innovators don't have to rely on second-hand feedback from the sales force. For example, product engineers might accompany surgeons during procedures to understand how the products are used and could be improved.

- Creating mechanisms for scanning the horizon, identifying emerging customer needs or potential opportunities, and spotting looming threats.

- Defining roles and responsibilities in such a way that people are expected to watch and understand the trends associated with particular stakeholders and bring those observations to bear on decisions.

Felin and Powell state: "The task of the [leader] is to design structures that put individuals in contact with their relevant environments, and to design processes that facilitate learning, sharing and aggregation of individual knowledge so that the collective organisation can make well-informed decisions."

2. CREATING THE ORGANISATIONAL INFRASTRUCTURE FOR RAPID EXECUTION, EXPERIMENTATION AND LEARNING

Just as the way leaders develop strategy has to change, organisations also need more dynamic ways of creating work products, and responding flexibly to market feedback. This involves developing a leadership system with the right 'hardware' – the processes, system, and skills needed to rapidly execute strategies and pivot as needed – and 'software' – a culture that supports experimentation and enables learning from failure.

> **"Agility is the new planning."**
>
> Loucks, Macauley, Noronha and Wade 2016

C. Build capacity for rapid execution

It's not sufficient to detect changes in the market that require a change in strategy; leaders have to be able to take action to respond to competitive threats or shifting customer expectations quickly, and adapt in response to what the data tells them. Leaders need to build *agility* into processes for decision-making and execution.

Our research highlighted a number of different ways leaders can build the capacity for rapid execution.

- **Increase customer centricity.** The rise of the digital economy has been accompanied in organisations by a growing interest in and increased adoption of the principles of design thinking, most significantly putting the customer at the centre of decision-making. According to Stu Winby: "One of the key challenges for the leaders we work with is to reconfigure internally around the customer. That means using technology to pull in customer data, building the capability to respond to what you're learning from the customer, and changing the customer experience as you go." Historically, some of the most successful challengers to incumbents have transformed their market by starting with the customer. For example, First Direct, the UK's original 'challenger' bank, started life as a blank sheet of paper with the word 'customer' in the middle. Julie Holyland, Learning and Development Lead UK and Nordics at Siemens, said: "One of the major shifts in our business is towards co-creation with customers. Rather than selling a product, we

work together to come up with a solution to the customer's issue. We don't necessarily know what the answer is at the outset – we define it together. This requires a different leadership mindset."

- **Iterative strategy development through cross-functional teams.** Work is done more and more through flexible networks rather than rigid hierarchies. Often these networks are virtual and enabled by digital collaboration tools such as Slack. Winby said: "What I'm seeing more in practice is the CEO and a couple of executives might get together to discuss an issue or concern. If they felt they needed more data, they would pull together a team for a day to iterate around a potential solution. The executives would then take that solution, poke at it, make suggestions and send it back to the project team for another iteration. They might go back and forth for multiple iterations over a few days. What happens with this approach is that they dramatically shorten the time it takes to get clarity of decision-making and they have a much better understanding of the risks. They flush out a decision by getting the people together who have the data and the experience or knowledge to develop a solution. Compared to the traditional hierarchical way of decision-making, it's like night and day. It's much faster, and it lowers risk."

- **Use agile development methods.** Agile development, which emerged around 25 years ago in software development, is increasingly spreading outside of the IT function and being deployed to support organisations' digital strategies. Agile involves rapid prototyping, customer co-creation, testing and reiterating, and is being applied to product and service innovation, marketing, and even HR. Agile development methods are suited to conditions where customer preferences change frequently, problems are complex, solutions are unknown, and time to market is important. These methods can result in increased productivity, shorter time-to-market, and increased customer and employee satisfaction.

- **Recognise and reward catalytic learners,** that is people who can take insights and lessons learning and turn them into actions that lead to high performance.

CASE NOTES: TALKTALK

Telecoms provider TalkTalk has significantly shifted the way it manages customer relationships from predominantly telephone-based to digital, with text messaging, apps, and live online chat becoming the main customer communication channels. This evolution towards digital is also reflected in the way the customer experience is designed. "It used to be telephone first and digital second," said Mark Dickinson, Chief People Officer, "but that's now been flipped on its head." The digital experience used to be incubated in teams that were separate to day-to-day customer operations, but these have now been integrated. Now, the customer experience is designed using agile development methods, in journey factories where different elements of the customer experience are developed in 'scrums' that look to improve the customer experience across all touch points, including digital.

D. Create a culture of experimentation and learning

Responding to the business opportunities afforded by digital means experimenting with many different solutions – not all of which will be successful. For example, at any one time Facebook may have 10,000 different versions of its platform running, as it constantly tests and refines the user experience.

The problem with many modern organisations is that the desire to get things done fast, 'right-first-time' and at lowest cost gets in the way of the experimentation, iteration and learning needed for innovation-driven growth. The processes and systems that enable rapid execution won't succeed unless leaders create a culture that encourages and values behaviours related to innovation, experimentation and learning from failure. According to Professor Tony O'Driscoll, of Duke University's Fuqua School of Business: "Developing a culture that fosters learning, collaboration, innovation and adaptability is fundamental to survival."

Innovation requires a higher tolerance for risk than we might see in steady-state operations. This in turn means accepting 'the right kind of failure', and being open to learning from it. Harvard Business School Professor Amy Edmondson has written extensively on how to create a context where learning from failure can occur – underpinned by 'psychological safety'. According to Edmondson, psychological safety is especially important in organisations "where knowledge constantly changes, where workers need to collaborate, and where those workers must make wise decisions."

The features of a culture of experimentation and learning include the following.

- A leadership style that encourages people to speak up, share ideas and ask questions, welcomes challenges to received wisdom, promotes the reporting of mistakes and displays humility and curiosity. People should not be penalised for asking for help or admitting to a mistake.

- An inclusive leadership style that values diverse perspectives. The body of research on the benefits of diversity suggests that, although diverse teams can generate more conflict and be harder to manage than homogeneous teams, they can be more rewarding in terms of idea generation and innovation.

- Culture derives from repeated behaviour that becomes a habit over time. Leaders need to develop structured approaches for analysing non-judgementally the causes of failure – as well as the drivers of success. This could be after-action reviews or retrospectives described by the Scrum Agile Development framework. The key is to create space for people to pause and reflect on what went wrong, what worked and what learnings can be used to improve the next iteration. In essence, leaders have to be highly effective at promoting a culture of feedback. Numerous studies have shown that team performance is highly dependent on the ability to give and receive high quality feedback, continually.

- Helping people understand the different types of failure. Preventable failures in routine operations are to be avoided. 'Intelligent' failures, which occur when trying to find solutions to problems that haven't been encountered before, can provide valuable new knowledge.

- Recognising that failure is a necessary by-product of experimentation. According to Edmondson: "Failure is inevitable in today's complex organisations. Those that catch, correct and learn from failure before others do will succeed. Those that wallow in the blame game will not." Some organisations even celebrate failure: W L Gore, for example, has been known to throw beer and champagne parties when initiatives are killed.

- Encouraging learning from experimentation and failure is not an excuse to tolerate low performance standards. There is an important balance to be struck here: leaders need to create a psychologically safe environment that acknowledges where there are areas of uncertainty, while also holding people accountable by setting high performance aspirations.

- It's also important to pay attention to what gets rewarded – acknowledging attempts as well as rewarding results.

Leaders need to be attuned to the fact that this type of culture is founded on trust, which requires consistent behaviour over time, and is easy to break. Garvey Berger and Johnston, in their book *Simple Habits for Complex Times,* describe a financial services institution that invested in programmes to help leaders innovate in an increasingly complex environment, but was not achieving the expected results. The mistake the organisation made was to hold leaders so tightly accountable for results that it had created a space where people were unwilling to take risks. "Leaders … feel caught in what seems to them to be an organisation that says one thing and does another. Yes, make up your own mind, set your own direction, pursue the areas of your passion to grow the organisation and its products. But do that without slipping for a moment away from the results that you have achieved before." A leader whose performance rating was downgraded when an experiment didn't work would be unwilling to take another risk in future that might pay off.

"Leadership is increasingly done from the side. It's not about the individual leader saying: 'here's my plan, follow me'. It's about enabling the team's contribution: fostering, encouraging and contributing to multiple conversations."

Brian Holliday, Managing Director, Digital Factory, Siemens plc

79%

of executives expect that **contingent and freelance workers** will substantially **replace full-time employees** in the coming years

The following example from Disney Animation demonstrates how this can work in practice.

"Organisational changes are done methodically, with the intent to evolve over time. We study and discuss current problems that exist in the organisation. We make one change at a time so we know what worked, what did not work, with learning being at the centre. We observe how it affects the system, we gauge its impact, we learn, we generate another theory, and debate the results. If something works, we do more of it. If something does not work, we learn from it and try something different. Everyone is involved in the process, not just management. Our technical staff members are contributing just as many ideas as the management team. We try to ensure critical thinking is happening at all levels. If you think a process could be made better, we encourage people to speak up, offer new ideas, run experiments, and share the results." Jonathan Geibel, Director of Systems, Disney Animation, quoted in Edmondson *et al*, 2015.

3. THE NEW RELATIONSHIP SKILLSETS LEADERS NEED

In the digital age the ways leaders lead are shifting from managing a hierarchy to being more network-driven, digitally enabled and based on influence rather than expertise or positional authority.

E. From managing through hierarchy to leading collaborative networks

One of the features of the digital economy is that work is done more and more through collaborative networks rather than through the traditional organisational hierarchy. Whereas historically a leader may have directed work from the top of a hierarchy with all employees reporting through the chain of command, now delivering work is about orchestrating a looser network of contributors who may well share in acts of leadership. This may involve leading cross-functional teams across internal silos, or leading a network of partners that reaches beyond the organisation boundaries to bring the right people together to address the problem at hand. This might include customers and even competitors, and can lead to counterintuitive approaches to collaboration. For example, when Valve discovered that students had hacked one of its games to change it from a single-player to multi-player version, rather than sue them for IP infringement, it offered them jobs. The 2018 MIT survey *Coming of Age Digitally: Learning, Leadership and Legacy,* found that over half of respondents said their organisation was intentionally enhancing and increasing co-operation with business partners and customers and, to a lesser extent, with competitors too. See Figure 8 on the following page.

There are a number of reasons for this shift.

- Networks are a more effective way of getting complex work done that involves contributors across functions and cross-functional processes. Networks build agility into the organisation as they are flexible and can be reconfigured as business needs change.

- They can speed up decision-making by breaking down the boundaries between functional silos. Bottlenecks are avoided as junior staff are empowered to resolve problems together with colleagues in other functions without having to refer decisions upwards.

- They bring together the experts with the knowledge and skills that are most relevant to the issue at hand.

- The deliverables of digital initiatives are often project based.

- Often, the capabilities needed to deliver digital initiatives are not available inside the organisation, or it's difficult to hire permanent employees due to high demand for scarce digital skills. Building collaborative networks made up of employees, contractors, and third party companies with expertise to fill specific skills gaps, is a way of gaining access to the resources needed.
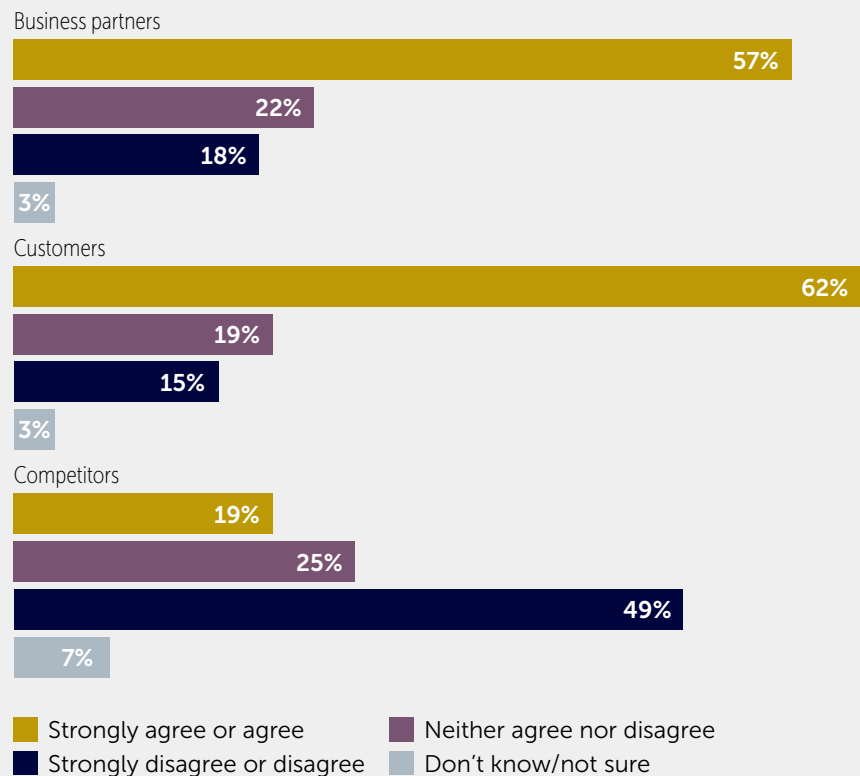
"Businesses are increasingly organised into multi-company 'ecosystems' that defy traditional industry boundaries and blur the distinction between competitors and collaborators, and producers and consumers."

Lesser, Reeves and Whitaker, 2018

FIGURE 8

Please indicate the degree to which you agree or disagree with the following statement: My organisation is intentionally enhancing and increasing collaboration with business partners, customers and competitors.

Business partners
- 57%
- 22%
- 18%
- 3%

Customers
- 62%
- 19%
- 15%
- 3%

Competitors
- 19%
- 25%
- 49%
- 7%

- ◼ Strongly agree or agree
- ◼ Neither agree nor disagree
- ◼ Strongly disagree or disagree
- ◼ Don't know/not sure

Source: MIT Survey *Coming of Age Digitally: Learning, Leadership and Legacy,* 2018

Jennifer Jordan said: "It's very difficult to upskill a workforce digitally at the level that many companies need in the required timeframe. They therefore have to partner with external providers or bring experts into the organisation that maybe wouldn't be found through traditional recruitment methods."

Leading networks places different skills demands on leaders.

- More inclusive and collaborative styles of leadership, bringing together contributors across internal and external boundaries to generate a broader perspective around problems and solutions.
- Influencing through persuasion and vision and getting buy-in rather than leveraging positional authority. Ahmed Sidky, Chief of Staff and Head of Business Agility at Riot Games, said: "We are an influence-based organisation. Even though none of the people in your team might report to you, you have to inspire them to achieve a specific outcome for players."
- Greater shared leadership: being prepared to step back and let other functions and individuals guide the team at the right moments.
- Leaders act as nodes in the network, facilitating the flow of communication.
- Ability to diagnose capability gaps and identify innovative ways of bringing the requisite skills on board.
- Leaders need to build skills in both configuring and managing the network. According to Stu Winby: "It's not just getting people together; you have to be able to manage and reconfigure the network to achieve the desired output."

"As a leader, I have to be a role model. I can't tell my team to use social networks without doing that myself. Tweeting, posting on LinkedIn or publishing blogs and podcasts may not necessarily come naturally to those who didn't grow up with these things, but you have to learn how to show up and be authentic in the virtual world."

Brian Holliday, Managing Director, Digital Factory, Siemens plc

- Creating plentiful opportunities to build in social time for the team – especially with remote work. MIT's Human Dynamics lab discovered that "social time turns out to be deeply critical to team performance, often accounting for more than 50% of the positive changes in communication patterns."

One of our interviewees, who had moved from a large global financial services company to a much smaller digital company, commented: "In financial services, everything had to be worked through the hierarchy: work had to move up before it could move out. Now I'm essentially a free agent. My job is to create opportunities. I have to persuade people to support my ideas. I can reach out to people at any level who it would be inappropriate for me to contact in a more hierarchical organisation."

F. Mastering digital tools for leadership effectiveness

Digital communications technology is playing a major role in changing the way that leaders lead. Smartphones, social media and online collaboration tools such as Slack make it easier for teams to stay in constant communication, but also make it harder to switch off. As well as mastering these technologies themselves, leaders have to work out how to build trust with remote team members, which is much harder than face-to-face. They also have to devise team communication norms that enable collaboration and delivery of the work without burning people out.

The evolution of digital communications has gone hand in hand with the rise in the number of remote workers. Leaders may rarely or never meet their team members in person and are having to become adept at managing people virtually. In addition, the combination of digital tools, flattening hierarchies and leadership through networks discussed elsewhere in this chapter, is leading to greater spans of responsibility. Whereas leaders may typically have had four or five direct reports in the past, they may now have 12 to 15 or more.

CEOs and other senior leaders now need to be adept at cultivating their presence on social media.

- Platforms such as LinkedIn and Twitter have become critical public relations channels. CEOs are having to carefully curate the stories they tell and the personas they present both to employees and to external stakeholders such as investors, regulators and potential employees. For example, Jeff Weiner, CEO of LinkedIn, will 'like' a photo from a team offsite or congratulate a sales team as a way of reinforcing the company's culture and talent and demonstrating that he is connected to the daily life of his organisation.

- Increased visibility comes with expectations that leaders will act as good role models – and face negative consequences when they fail to live up to those expectations. For example, Elon Musk's increasingly erratic, marijuana-fuelled tweets in 2018 when he announced his plan to take Tesla private and accused a British diver who was co-ordinating the rescue of the Thai schoolboys trapped in a cave of being a paedophile, were followed by a 30% drop in Tesla's share price the following month. Musk also had to pay a $20m fine to the SEC and was forced to step down as Tesla chairman.

- Sites such as Glassdoor and thelayoff.com are making CEO performance more transparent. For example, Glassdoor allows employees to rate their CEO. Investors are also increasingly using these sites to help inform their investment decisions. There's a growing expectation that senior leaders engage with social media and respond directly to feedback; those who fail to respond may be viewed as remote or out of touch.

- Social media and other tools such as employee pulse surveys and employee sentiment analysis can also be an effective means for CEOs to get feedback on perceptions of the company and their leadership.

> "Technology is having a massive impact on what it means to lead. Virtual meetings are becoming the norm, and the demands of leaders around availability and transparency are increasing. Everything you say or write as a leader can be shared, and you're expected to be available at all hours of the day or night."
>
> Chris Humphreys, CEO, APS, Hogan Assessments Distributor UK

THE 'DARK SIDE' OF DIGITAL COMMUNICATION

While digital communications tools have enormous benefits for leaders in terms of engaging with their teams, colleagues and the wider community, there are serious downsides. The always-on nature of technology, and its potential negative impact on mental health, has been well-documented. This is particularly challenging for leaders, who have to attend to their own wellbeing as well as look after their teams. The boundaries between professional and personal life are increasingly blurred. For example, one leader we interviewed is expected to respond to texts from the CEO within 15 minutes – at all times!

Collaboration technologies such as Slack allow remote teams to share information in real-time. They can enhance collaboration and keep everyone in the loop. However, they can actually slow down decision-making as they open up the floodgates for management by consensus. Too many people expect to have their opinion heard and the volume of unstructured information becomes overwhelming.

Another challenge for senior leaders is that, while technology is advancing at pace, the ethical questions raised by technology are largely unresolved. For example, it's possible to use sentiment analysis to understand how engaged employees are by monitoring their email, rather than asking them to complete a survey – but is it ethical to 'snoop' on employees? Similarly, investment in automation may displace workers, but what responsibilities does the employer have to reskill or redeploy those affected? Leaders will be required to understand the implications of the choices they make and steer an appropriate course through what may be choppy waters.

Finally, digital technology may allow for a level of micro-managing that was unheard of in the past. A Brookings Institute article recently described how a four-star general spent two hours watching footage from a Predator drone beamed to his Washington DC headquarters from the Middle East. Sitting behind the live video feed, he witnessed insurgent leaders openly carrying weapons and sneaking into a compound of houses. Having personally checked that the site was a legitimate target, he gave the order to strike. The general proudly recounted how he even decided what size bomb his pilots should drop on the compound. Similarly, a captain in special operations forces described how a brigadier general radioed him while his team was hunting down an Iraqi insurgent who had escaped during a raid. Watching live video back at the command center in Baghdad, the general had orders for the captain on where to deploy not only his unit but also his individual soldiers. Another interviewee described how officers hundreds of miles away would tell him which roads his vehicle should take during raids in Afghanistan. Will we find similar parallels in the corporate world where executives can actively intervene in decisions that might best be made by those on the ground?

G. Leaders as enablers of experts

Our final observation about how the skills of leaders are changing in the digital age relates to the balance leaders have to strike between being experts in their own right and being enablers of other experts. Leaders do need expertise in their field, of course, but we found that, particularly in knowledge-driven businesses or parts of the business where creative work or innovation happens, the demands of leaders are less about telling others what to do and more about creating a context for others to do their best work and make good decisions. For example, Cathy Lewis, Group HR Director of the insurer RSA, said: "In our industry, a big shift we're seeing in the skills required of leaders is that it's less focused on in-depth technical insurance knowledge and more about understanding and responding to customer behaviour."

"When we looked at what capabilities leaders most had to ramp up in the digital age, it was about empowering and facilitating their teams: it's the one leadership capability we can't do without today. The way work gets done is more and more about operating cross-functionally, and people in your team are often also co-opted to other teams. Command and control just doesn't work in that fluid, agile environment."

Mark Dickinson,
Chief People Officer, TalkTalk

The pace of change driven by digital disruption means organisations need to respond rapidly, as we have discussed. In order to do this, leaders are having to devolve decision-making lower in the organisation to empower people who are closer to customer or market needs, and therefore better placed to make judgments about the choices that will result in business success. One of the drivers is that information processing is becoming decentralised, so data is more readily available to support decisions being made deeper in the organisation. Ahmed Sidky of Riot Games said: "When you're dealing with knowledge workers, you are dealing with a highly capable group of people. The task of the leader is to unlock your people's knowledge, motivation and creativity, not just focus them on completing tasks. You have to create an empowering environment where individuals can contribute their best work."

There are a number of implications.

- The role of the leaders becomes more about being a coach – asking good questions rather than being directive. According to Jennifer Jordan: "When you're faced with so many unknowns in the digital world, leaders can't have all the answers. They have to be prepared to ask the right questions and be sufficiently humble and open to learning to be able to seek out expertise, wherever that may come from."

- Leaders have to create frameworks for effective decision-making in contexts with highly uncertain outcomes. According to Perfetti *et al* (2019): "Leaders must provide the context for others to make good decisions rather than set up a system where they make all the decisions."

- Leaders have to steer a delicate course between decentralisation and chaos. According to Felin and Powell: "A company that [goes too far in flattening the organisation and giving full decision autonomy to unaccountable individuals at the organisation's boundaries] without proper systems for converting individual knowledge into collective intelligence, is liable to spin out of control." For example, Valve gives full authority to individuals to propose projects, recruit project teams, establish budgets, set timelines and ship products to customers. However, it also has a 'rule of three'. One or two people acting alone can't move a project forward, but a group of three can proceed if all are in agreement.

"Leaders have to be able to manage a fluid organisation made up of employees, contractors and consultants who all need to be just as connected as direct employees. This means that their ability to lead through change, their influencing skills, and their ability to lead from purpose all need to be significantly dialled up."

Simon Linares, Group HR Director, Direct Line Group

DISCIPLINE AS THE NECESSARY COROLLARY TO EMPOWERMENT

Empowerment is important for creating the conditions for creativity and innovation, but it has to be balanced with discipline. Leaders must create a strategic framework that achieves two seemingly irreconcilable conditions: focusing on outcomes while creating space and flexibility for experimentation.

Ahmed Sidky, Chief of Staff and Head of Business Agility at Riot Games, described the approach at his company: "We have a high level of empowerment that's very engaging for teams, but it's not a free-for-all. The strategy and outcomes are set top-down. So we will say, strategically, we want to win A, B and C, so that means we need to change our players' behaviours to X, Y and Z. Here are the constraints such as time and budget that you need to operate within, but it's up to the teams to determine the tasks and decide what to do to achieve that desired outcome."

W L Gore has built a consistent track record of innovation over the sixty years since it was founded. Gore's unique organisation design is described as a 'lattice' of deep relationships built without the need for formal hierarchies. Any associate can reach out to anyone else, anywhere in the world, regardless of respective seniority. However, although the culture is highly empowered, it takes a disciplined approach to innovation. The principle underpinning Gore's innovation process is that the essential functions that develop a new product and bring it to market must all be involved from the outset. The company describes this as a 'three-legged stool'. Engineering, manufacturing and sales must all sign off an idea before it can be developed further. "It's about getting the critical decision makers in the room together as early as possible," said Debra France, who's responsible for global leadership development and talent strategy. "We work those three relationships from the start so they can contribute their insights and concerns from day one. We lean in to potential conflicts at an early stage, and that means by the time you're ready to scale, you've had a chance to resolve all the issues."

Another element of Gore's innovation system is that it runs on reputation. Associates don't have jobs; they make commitments and are judged by how well they keep them. The important point is that individual associates decide what their commitment should be. The role of the leader is not to tell associates what to do, but to inspire and guide them so they bring their choice and discretionary energy to the task.

Although Gore's organisation model pre-dates the digital age, in many ways it shows how the principles of empowerment, experimentation and tolerance of failure discussed through this report can work in practice.

03

DEVELOPING LEADERS FOR THE DIGITAL AGE

In this chapter we consider to what extent organisations are rethinking their leadership development practices to prepare leaders for the digital age. We examine current and emerging practices and explore the impact of technology on learning for leaders. We also revisit the core premises of adult learning and consider how they need to be applied to the challenges of digital disruption faced by today's leaders.

TOPICS COVERED

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> "The only skill that will be important in the 21st century is the skill of learning new skills. Everything else will become obsolete over time."
>
> Peter Drucker

> "Today's leaders need to navigate all kinds of challenges and opportunities, and their training should reflect that. This means designing an experience-based curriculum that addresses many competencies simultaneously. Participants should work on real projects connected to their everyday jobs, and their managers should ensure that the projects put participants through a sufficiently diverse set of experiences."
>
> Daniel *et al*, 2018

In Chapter 2 we explored new leadership models for the digital age and concluded that although in many ways the drivers of effective leadership remain similar to what they have always been, there are some notable differences. In this chapter we consider what this means for leadership development.

For the most part, organisations are in only the early stages of rethinking their strategies for developing leaders who are capable of responding to the opportunities and challenges of digital disruption. Many are dabbling in educating leaders about emerging technologies and raising awareness of new business models. A smaller proportion of organisations are further down the line in helping leaders shift their mindsets about how to succeed in the digital age. Only very few are investing in instilling leaders with the skills and capabilities that need to accompany those mindsets, for example by using leadership development as a mechanism for putting those capabilities into practice to address emerging business challenges. To date we are observing a more narrow focus on awareness building and educating mindsets rather than more fundamentally addressing the capabilities required to develop and execute new business strategies.

It is clear that development interventions have not caught up with the actual impact of the digital age. We suspect this is due in part to inertia or a lack of urgency. Organisations over the last two decades have made enormous financial and emotional investments in leadership competency frameworks and the tools associated with them. In addition, there is genuine uncertainty or even cynicism about the validity of the new digital leadership models. Are they simply hype? Are the purveyors of these frameworks simply looking to cash in on the next fad? Are they simply the existing models of change and entrepreneurial leadership recast in new terminology?

At the same time, leadership development interventions themselves are moving towards more abbreviated experiences with a greater emphasis on coaching and feedback/assessment tools. For those outside of high potential talent pools, development experiences are increasingly limited to technology-enabled formats such as online learning modules. Paradoxically, there are no new pedagogical methods that accompany the emerging leadership models with one potential exception – virtual reality simulations which are still in their infancy. We believe that the demands of digital leadership may require a return to the more intensive and extensive learning approaches to acquire mastery. In other words, today's emphasis on bite-size content, web-based learning portals and virtual cohorts are likely to prove poor facilitators in the acquisition of digital leadership skills.
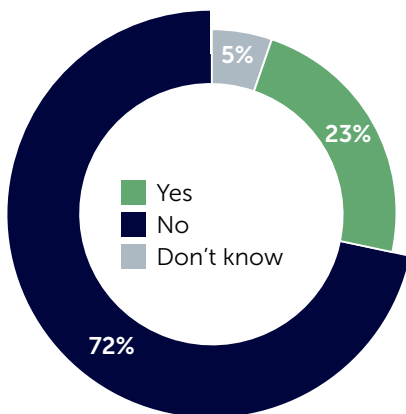
In short, the task of developing leaders fit for the digital age is not so much that we need to completely reinvent our existing model of leadership development with its emphasis on education, assessment, experimentation, feedback and coaching. It is that on the whole we are not applying what we already know as effectively as we could to deliver the learning and business outcomes we need. Our concern is that the uncertainty around the real new demands for leaders may encourage organisations to adopt 'old models in new clothes' or focus more narrowly on educating mindsets rather than instilling the tangible skills that must be developed alongside these mindsets.

3.1
DEVELOPING LEADERSHIP CAPABILITY FOR THE DIGITAL AGE – WHAT'S THE CURRENT STATE OF AFFAIRS

CRF SURVEY FINDINGS

One of the broad conclusions of our research is that, while many organisations recognise that they need to prepare their leaders for success in the digital economy, most are still in the early stages of building digital leadership mindsets and capability. Less than one-quarter of respondents to the CRF survey conducted as part of this research have formal programmes in place for developing digital leadership capabilities. See Figure 9.

Although some organisations have programmes up and running, the majority are currently either weighing up options or in the planning phase. Just over one-quarter (28%) have either implemented programmes or are at the pilot stage. Just over one-third (37%) are in the planning stage or have not yet implemented their plans, and 29% have just begun to think about what to do. See Figure 10.

FIGURE 9

Do you have formal programmes in place for developing digital leadership capabilities?

- Yes
- No
- Don't know

5%
23%
72%

N=99

FIGURE 10

Which of the following best describes the stage your organisation has reached in thinking about how to build digital leadership capability?

We haven't thought about it yet/it's irrelevant to us
6%

We have just started to think about it
29%

We have begun to plan but have not yet rolled out
26%

We know what we want to do but have yet to implement
11%

We are at pilot stage
16%

We have programmes in place
10%

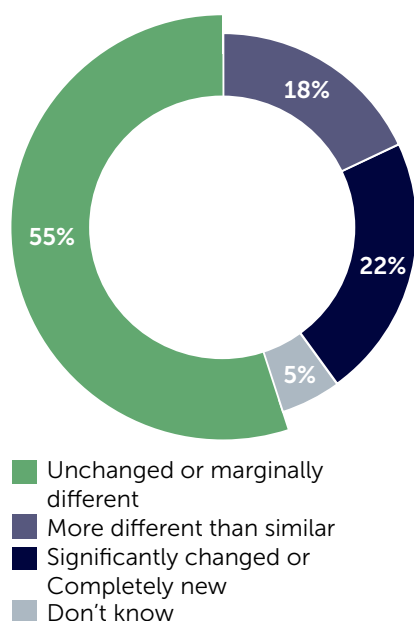We have well-developed, evaluated methods for building digital leadership capability
2%

N=99

To what extent has the content of your leadership development programmes and activities evolved to meet the development needs of digital leadership?

- Unchanged or marginally different
- More different than similar
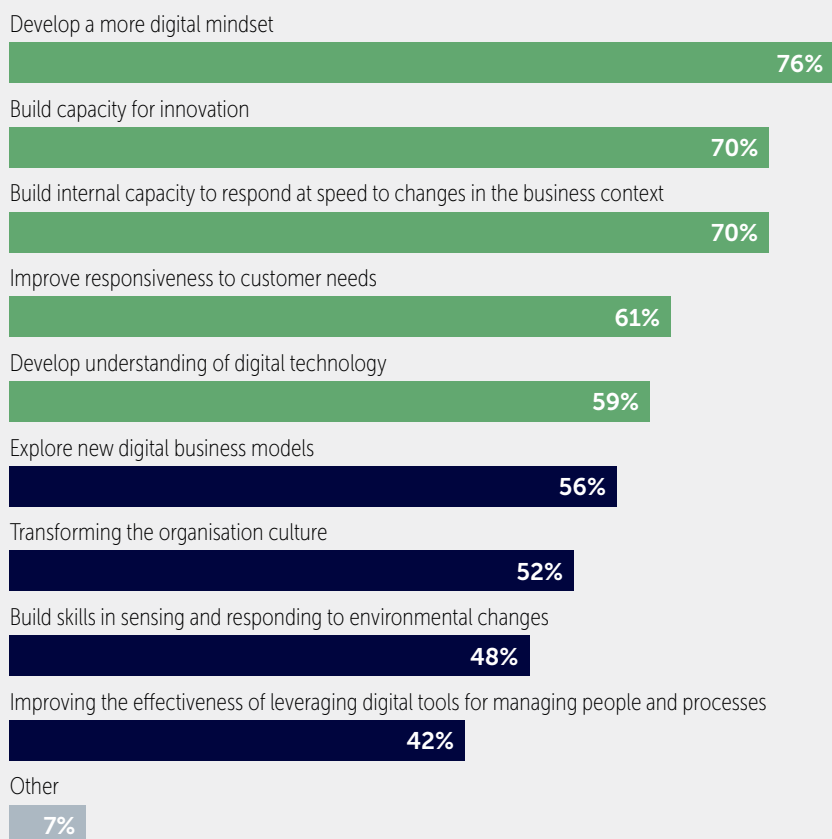- Significantly changed or Completely new
- Don't know

N=100

We also asked about the extent to which organisations are updating their existing leadership programmes to meet the needs of digital leadership. For just over half (55%) the content remains either unchanged or only marginally different. Some 22% report that the content of their programmes has significantly changed or is completely new. See Figure 11.

In terms of the ways in which leadership development programmes are delivered, we found that the majority have seen little or no change that's specifically related to developing digital leadership capability. Only 16% of respondents report having significantly changed their delivery methods.

We asked respondents to specify the objectives of their digital leadership development programmes. The most popular choice, selected by three-quarters of respondents (76%), related to developing a digital mindset. The next-most popular was to enhance the ability to respond to market opportunities by building either greater capacity for speed (70%) or innovation capability (70%). Building an understanding of digital technology was also a high priority, cited by 59% of respondents. Less important (cited by 42%) was to develop capability to effectively deploy digital tools to manage people and processes internally. This seems surprisingly low if you consider leadership to be the essential mechanism for any organisation to adapt to the new digital demands. We suspect this may be more a product of the uncertainly surrounding just what capabilities need to be developed. See Figure 12.

What are the key objectives of your digital leadership development programmes?

Develop a more digital mindset — 76%

Build capacity for innovation — 70%

Build internal capacity to respond at speed to changes in the business context — 70%

Improve responsiveness to customer needs — 61%

Develop understanding of digital technology — 59%

Explore new digital business models — 56%

Transforming the organisation culture — 52%

Build skills in sensing and responding to environmental changes — 48%

Improving the effectiveness of leveraging digital tools for managing people and processes — 42%
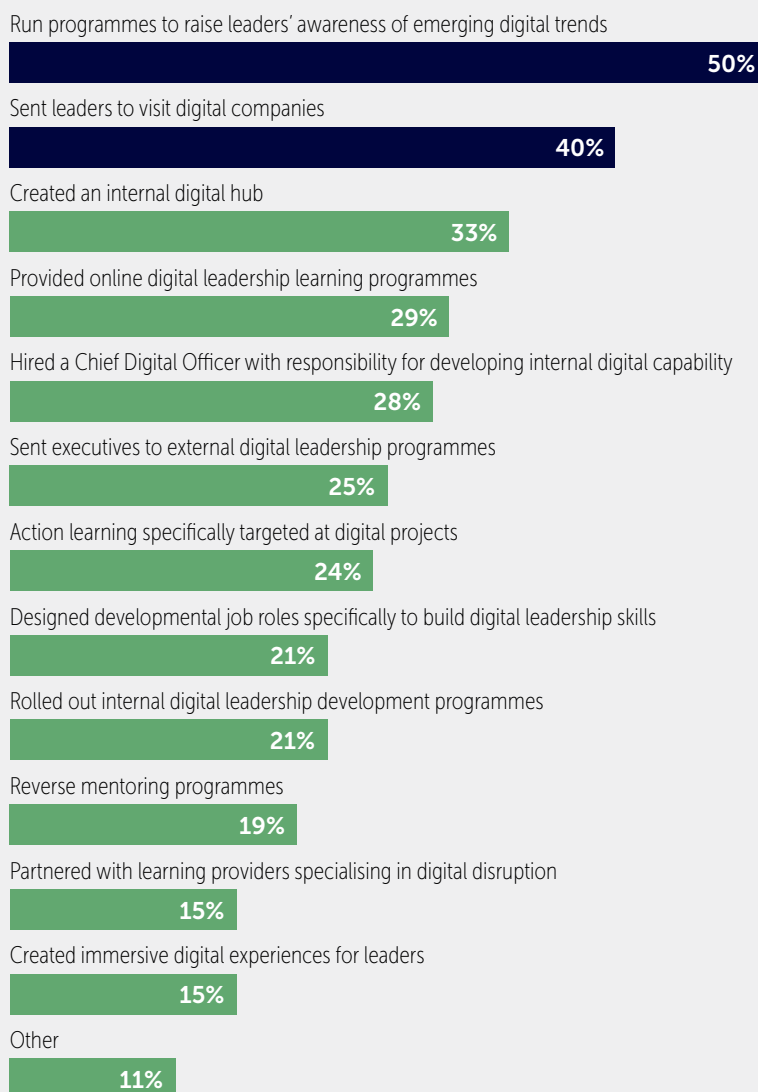
Other — 7%

N=71

62%

saw **little or no change** in delivery methods

Looking at the specifics of what methods organisations have deployed to develop digital leadership capability, the main focus so far has been on raising awareness of digital trends (cited by 50%), often by arranging visits to digital companies (40%). These are primarily mindset building initiatives. However, they are fraught with serious transfer of learning challenges. While it is fascinating to observe the operations of a fintech startup with five hundred employees who are all under thirty-eight years of age, imagine importing its culture and work processes into a global banking concern with a long history of hierarchy and strong risk management processes. One-quarter of respondents (25%) have sent executives on digital leadership programmes at business schools, and 29% have invested in online digital leadership programmes. Only a minority have experimented with some of the options we discuss later in this chapter, such as action learning projects focused on building digital businesses (24%), creating developmental roles to help leaders build relevant digital experience (21%), or immersive learning programmes (15%). These are potentially the capability building outcomes. See Figure 13.

FIGURE 13

Which of the following have you deployed to build digital leadership capability?

Run programmes to raise leaders' awareness of emerging digital trends
50%

Sent leaders to visit digital companies
40%

Created an internal digital hub
33%

Provided online digital leadership learning programmes
29%

Hired a Chief Digital Officer with responsibility for developing internal digital capability
28%

Sent executives to external digital leadership programmes
25%

Action learning specifically targeted at digital projects
24%

Designed developmental job roles specifically to build digital leadership skills
21%

Rolled out internal digital leadership development programmes
21%

Reverse mentoring programmes
19%

Partnered with learning providers specialising in digital disruption
15%

Created immersive digital experiences for leaders
15%

Other
11%

N=72

34%

don't know if their **digital leadership initiatives** are effective

24%

were judged **unsuccessful**

We asked respondents to describe in what ways their methods for developing leaders were changing in response to the rise of digital. The following themes emerged, in descending order of priority.
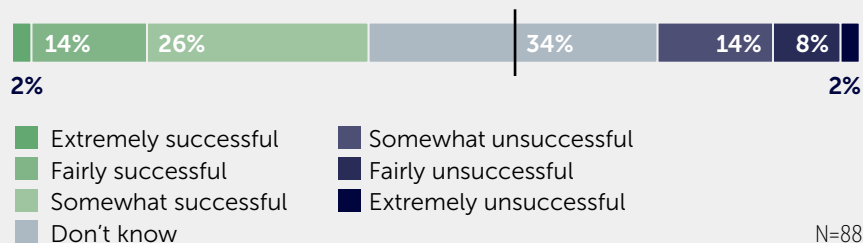
- Using digital tools and platforms for on-demand learning and to decrease time spent on face-to-face/classroom learning.
- Getting future leaders to deliver innovative projects and take part in innovative learning situations like 'hackathons'.
- Co-creation and learning from other digital businesses and economies, as well as start-ups.

However, a significant proportion of respondents were just starting out or had not yet made any changes.

When asked how effective investments in building digital leadership capability have been so far, the most common answer (cited by 34% of respondents), was 'Don't know', suggesting that it's still too early to tell what's working and what's not. Some 16% of respondents judge their actions to have been fairly or extremely successful, and one-quarter (26%) somewhat successful. One-quarter (24%) were judged unsuccessful. These responses demonstrate the inherent riskiness associated with forays into development initiatives in this area. Who knows whether they will work? These mixed results, together with the paucity of examples of good practice to emulate, may explain the slow take-up of digital leadership development initiatives. See Figure 14.

FIGURE 14

To what degree have actions taken in your organisation to grow digital leadership capability been successful?

14%	26%	34%	14%	8%

2%   2%

- Extremely successful
- Fairly successful
- Somewhat successful
- Don't know
- Somewhat unsuccessful
- Fairly unsuccessful
- Extremely unsuccessful

N=88

When we probed further to discover the most and least effective methods of developing digital leadership capability, the following themes emerged.

MOST EFFECTIVE	**LEAST EFFECTIVE/ CHALLENGES FACED**
• Hiring external talent with the required skills or brining in external experts was the most effective method for delivering results quickly. • Immersive learning programmes and exposure to different industries, trade events and summits. • Use of digital tools and techniques native to digital teams, like hackathons. • New project opportunities and reverse mentoring for existing leaders.	• Failure to shift mindsets and lack of buy-in – especially in senior leadership where digital is not seen as a priority or as a genuine need. • 'Old ways of working' prevail and make the shift hard. • Lack of internal talent or necessary skills/ knowledge. • Budget constraints and competing priorities. • Defining the need – 'what is the real business need?'

25%

have **programmes in place** to develop the organisation culture required for success in a digital economy

In summary, most organisations are still in the planning or experimentation phases of developing digital leadership capabilities, and there is a lack of clear consensus about what works.

Similarly, with regards to how the organisation culture needs to evolve, our survey suggests that although most organisations recognise the need to develop the culture to support their digital transformation, it is early days in terms of taking tangible action. So far only one-quarter (25%) of survey respondents have digital culture programmes in place, while half (49%) are planning to implement digital culture change programmes at a future date. Yet culture is likely to be the essential seedbed for real digital transformation to occur. By necessity, the levers for changing culture must also be revisited – the incentive systems, the metrics for performance, the behavioural norms. However, it may be particularly challenging to reproduce the more entrepreneurial norms in successful large organisations.

3.2
WHAT'S HAPPENING IN PRACTICE?

Our interviews with companies showed that, to the extent they are investing specifically in digital leadership capabilities, they are tending to focus on four key objectives.

- Building awareness of technology and new business models and opportunities.
- Diagnosing current capability and identifying learning needs.
- Using leadership development as a way of exploring digital business opportunities, through action-learning type projects.
- Helping leaders build capacity to deal with higher levels of complexity.

1. BUILDING AWARENESS OF TECHNOLOGY AND NEW BUSINESS MODELS AND OPPORTUNITIES

Not many people in senior leadership positions today could be considered 'digital natives' – that is, those who have grown up in the digital age. Leaders have to build familiarity not only with the technology, but also with new business models and the social and organisational trends that are shaping them. For example, the sharing economy has spawned companies such as Airbnb and FundingCircle (a peer-to-peer lender), and digital transaction platforms such as Uber and Alibaba are for many people now the main way they purchase goods and services. One of our interviewees commented: "Many of the people in senior leadership positions are not sufficiently digitally savvy, which is a barrier to them leading effectively in the digital age."

Organisations are adopting various strategies to help leaders build their understanding of the digital marketplace and open their eyes to the business opportunities.

- **Investment in online curriculums and resources focused on digital.** Many companies provide digital content and resources that leaders can access to

"Leaders who don't have digital literacy will not survive in the future. They need to not only understand the technology, but more importantly how their teams should use it to disrupt their competitive position, help improve business performance or enhance the customer experience."

Ravi Bhusate, *Global Head of Leadership and Management Practice, BTS*

build their knowledge. For example, Bloomberg has created a learning 'playlist' for digital. Each quarter there's a different focus, for example automation or AI. L&G has developed an interactive app to educate leaders on new technologies. EY awards 'badges' to leaders who complete online digital content.

- **Digital awareness programmes,** both in-house and external, to educate leaders about digital. For example, a number of companies we interviewed have had executives attend in-person and virtual programmes at California-based Singularity University (a global learning and innovation community focused on helping leaders explore the opportunities and implications of 'exponential technologies') and similar institutions. Signify, the world leader in connected lighting systems, has developed the 'EDGE' programme, which is designed both to educate leaders about digitisation and to foster a more digitally-oriented mindset. Leaders spend a week exploring possibilities by visiting other industries and learning topics such as design thinking. TalkTalk, the telecoms provider, has put cohorts of leaders at different levels in the organisation through a diploma in digital leadership. The objective is to help leaders enhance their leadership capability with digital skills. The programme is partly delivered by a third party provider, and partly delivered by internal digital experts to tie the experience to the overall digital journey the company is going through. Fujitsu has taken high-potential future leaders to Estonia to experience what *Wired* magazine has named 'the most advanced digital society in the world.'

- **Build understanding of new business models.** This is often done through case studies or simulations. For example, BTS has developed a digital simulation – Futurestorming – which is designed to get executives to imagine a digital future for their organisation and work back from the vision to map out the steps needed to deliver that vision. According to Ravi Bhusate, Global Head of Leadership and Management Practice, BTS: "Many leaders find it hard to believe the future scenario they've designed is obtainable. It's essential that leaders develop their personal connection to the vision, and create a storyline that takes them from today to that future scenario, so the steps they have to take become more sharply defined and real." We also see companies using digital incubators or targeted acquisitions as an opportunity to build leaders' expertise in new digital business models. For example, Bupa, the international healthcare group, has acquired a number of start-ups in the healthcare industry, and is using these acquisitions as an opportunity to help leaders build experience in digital business. Unilever's acquisition of Dollar Shave Club was partly motivated by the opportunity to acquire a system and knowledge base for online selling.

- **Teaching leaders the new management methods that underpin digital.** Many of the core management processes deployed by digital businesses are different to traditional methods for developing strategy, planning, budgeting and project management. Leaders are having to become skilled in concepts including experimentation, design thinking and agile development methods. For example, KPMG has put some of its future senior leaders through programmes with London Business School focusing on learning through discovery and experimentation. Bupa has taken its senior leaders through a programme to learn customer-centred design. Avanade has built design thinking into all its leadership programmes, and uses action learning projects to give participants an experience of applying the concepts to real life scenarios.

- **Teaching leaders how to build their digital footprint,** and raising leaders' awareness of social media and virtual management tools. For example, Signify runs social-selling masterclasses for leaders. Royal Philips, the health technology company, has updated all its leadership programmes to upskill leaders in storytelling and using digital tools.

- **Reverse mentoring** is widely used. Senior executives are paired with more junior colleagues who educate them on topics such as technology, social media and current trends. For example, Unilever in Turkey set up a shadow 'Millennial Board'. Team members were invited to make a pitch on Instagram to be elected to the board. The two boards meet regularly to educate the board on new

> "Digital business agility is not just another factor to keep an eye on, or an issue to be considered among a raft of competing priorities. It is ... the single most important organisational capability required to compete and win in an increasingly disruptive world."
>
> Loucks, Macauley, Noronha and Wade, 2016

technologies and to discuss the issues and expectations of younger generations at work. Similarly, presentations on the findings of action learning projects by tech-savvy employees to executive panels is another form of mentoring.

2. DIAGNOSING CURRENT CAPABILITY AND LEARNING NEEDS

Before choosing where to build digital leadership capability and in order to prioritise resources, it's important to understand the gap between the business need and current state. We are beginning to see diagnostic tools that specifically target the capabilities required for digital transformation. Some look at technical skills. For example, Signify undertook a digital assessment to identify areas where upskilling was required. This took the form of a gamified survey that looked at the technology people use and their understanding of new technologies.

Although it is early days, we are also seeing leadership models and related assessments focused on helping leaders build capabilities to face digital disruption. While much work remains to be done to determine whether they are scientifically valid for the purpose of predicting performance, they can be useful for identifying learning needs. As a matter of fact, such assessments may prove to be an essential feedback tool in the upskilling process.

One example is the Agile Leader model and assessment, which has been developed by the Global Center for Digital Business Transformation (DBT Center), an IMD and Cisco Initiative, together with HR consultancy metaBeratung. Building on the DBT Center's *Digital Vortex* work discussed in Chapter 1, the Agile Leader model highlights four competencies that are common to agile leaders, and three key behaviours that leaders need to adopt to successfully navigate disruptive environments. See Figure 15.

FIGURE 15
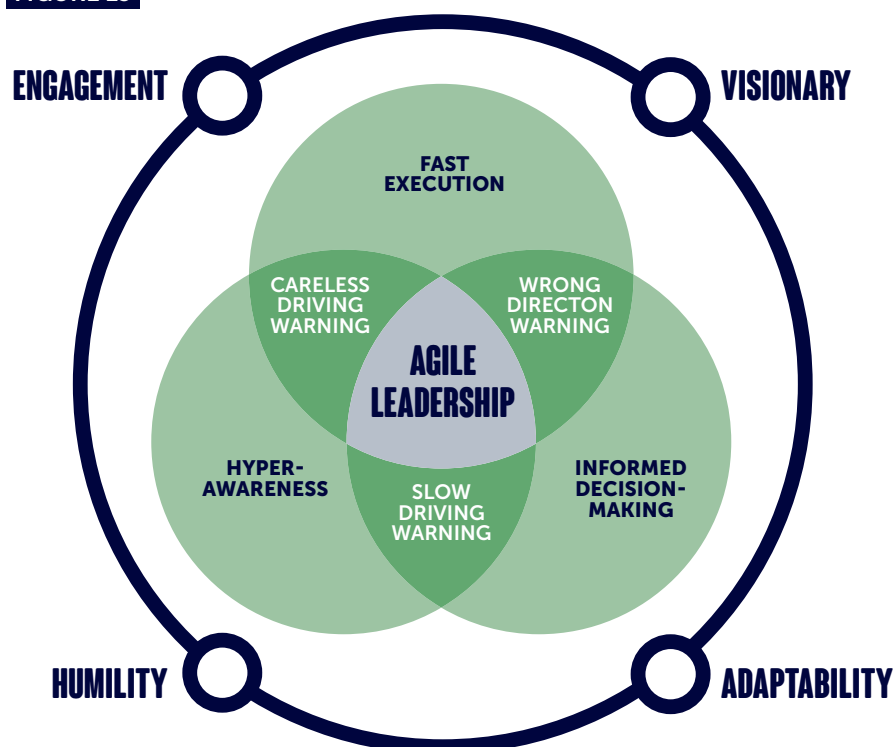
Source: Adapted from Neubauer *et al,* 2017

> "There's a lot of data now that shows humble leaders are more effective and inspire higher engagement."
>
> Reece Akhtar, Analytics and Product Innovation Lead, RHR International

The four competencies, forming the acronym HAVE, are as follows.

1. **Humble.** They are able to accept feedback and acknowledge that others know more than they do.

2. **Adaptable.** They accept that change is constant and that changing your mind based on new information is a strength rather than a weakness.

3. **Visionary.** They have a clear sense of long-term direction, even in the face of short-term uncertainty.

4. **Engaged.** They are willing to listen, interact, and communicate with internal and external stakeholders, and have a strong interest and curiosity in emerging trends.

The three behaviours combine to form a meta-capability that Loucks, Macauley, Noronha and Wade call digital business agility.

1. **Hyperawareness.** Sensing the changes in a company's environment that matter most by collecting relevant data and insights. This includes sensing relevant digital trends and understanding changing competitive dynamics, as well as collecting key insights from customers, partners, employees and physical assets.

2. **Informed decision-making.** Analysing data (using advanced analytics), absorbing learnings and involving the right people to make good decisions consistently. Leaders also have to draw on experience and intuition, developing a talent for discriminating between useful information and background noise.

3. **Fast execution.** Executing quickly and scaling rapidly, while shedding unsuccessful or outdated approaches.

Neubauer *et al* found that leaders who scored highly on the digital business agility scales were significantly better equipped to deal with today's disruptive business environments than lower-scoring leaders.

The model was developed based on qualitative interviews with 19 digital leaders and surveys of over 1,000 IMD alumni who had been involved in digital transformation. The competencies have been validated against Hogan personality assessments, so individual leaders can be assessed against the model using the Hogan scales.

Professor Jennifer Jordan at IMD has also developed a 360 assessment that measures and provides feedback to leaders on each of the competencies and behaviours.

> "Experience – not genetics, not training programmes, not business school – is the primary source of learning to lead."
>
> Morgan McCall, Professor Emeritus, USC Marshall School of Business

HOW DEVELOPABLE ARE THE AGILE LEADER COMPETENCIES?

In putting together a plan to develop digital leadership capabilities, organisations need to be mindful of how easy it is to develop the relevant characteristics. Jennifer Jordan shared with us the conclusions of her research on the degree to which each of the competencies described opposite can be developed.

- Hyperawareness, informed decision-making and fast execution can all be developed through practice. For example, Jordan takes leaders through exercises to stimulate them to access new information outside of their usual frame of reference, or to increase their awareness of opportunities outside their industry.

- Humility can be developed by leaders who are willing to put themselves in novel situations where they have to learn. This can be facilitated through, for example, job rotations or project assignments.

- Engagement relies on listening skills and self-awareness, which can be developed.

- Adaptability can be developed, for example by getting leaders to practise being their own devil's advocate. However, it relies on individuals being able to tolerate ambiguity, which is more of a personality trait and therefore harder to change.

- Similarly, the Visionary competence is harder to develop, as it relates to core aspects of personality such as openness to experience, and also requires a high level of cognitive capability.

As we discuss further below, leadership development is one part of the leadership 'system' that also has to consider whether it's better to hire or develop the required leadership capabilities. Particularly for those characteristics that are harder to develop, we need to update the criteria we use for identifying and hiring leaders, to make sure they give sufficient weight to digital leadership success factors.

"You can't develop leadership capabilities in isolation. They have to be developed in context: in real time, around real topics that matter to the business. It's not action learning in the classic sense, it's action doing."

Professor Tony O'Driscoll, Duke University

3. FROM ACTION-LEARNING TO ACTION-DOING

How do leaders develop? This is a large and complex question, tackled in much greater depth in CRF's 2015 research *Leadership Development – Is It Fit for Purpose?* In short, however, decades of research have shown that, to the extent leadership can be learned, leaders learn through experience. Organisations can improve the way they develop leaders by identifying developmental opportunities, and helping leaders learn from those experiences.

When we look at *what* leaders need to learn to succeed in a digitally disrupted context, the first step is about a change of mindset: seeing markets, competitors, customers, and work arrangements in a different way. When your most threatening competitor is a start-up that imagines your business differently to you, the traditional tools for establishing and defending a competitive position cease to be effective. For example, Airbnb is a huge competitive threat to the hotel industry, yet owns none of the four million properties listed on its platform. Its founders had no background in the hotel industry, and yet the company fulfilled 8.1% of all demand for paid lodging in the US in 2017.

One way of thinking about the new mindsets required is to use the framework of adaptive and technical leadership developed by Ronald Heifetz of Harvard University.

- **Adaptive *leadership*** is required to solve "problems for which there are no simple, painless solutions – problems that require us to learn new ways." Adaptive problems demand innovation, experimentation and learning.
- **Technical *problems*** may be highly complex and require deep expertise – Heifetz cites the example of doctors running a busy A&E department in a hospital. However, these problems are technical "because the necessary knowledge ... already has been digested and put in the form of a legitimised set of known organisational procedures guiding what to do. They are the product of previously accomplished adaptive work."

Leaders need to be able to identify when they are faced with 'adaptive' challenges, and to avoid addressing 'adaptive' situations using 'technical' approaches.

One method for allowing leaders to practice adaptive leadership is action learning. Conger and Benjamin (1999) state that: "Action learning programmes represent perhaps one of the few training designs that utilise learning principles to develop complex leadership skills." Well-designed action learning interventions create a space where leaders can experiment with new business ventures while learning new skills. They also allow leaders to develop many of the skills described in Chapter 2, including fast execution, experimentation, collaboration and building and managing networks. Although the concept of action learning is over 50 years old, it is still highly relevant for developing leaders today.

Some organisations are using action learning as a way of linking strategy development and leadership development, or even using leadership development as a foundation for business transformation. Here are some examples of what they are doing.

- Identifying real strategic and work process challenges that are critical to future success but that the business hasn't yet been able to resolve – that is, *adaptive* challenges.
- Configuring teams to focus on developing, testing and sometimes implementing options. Team members may be assigned full-time for the duration of the project, or on a part-time basis.
- Providing the resources participants need to learn as they go. This might be individual or team coaching, or learning interventions to teach specific skillsets or knowledge required to complete the challenge.

- Finding committed post-programme owners and sponsors who ensure that insights from these learning projects turn into long-term organisational initiatives rather than soon-forgotten presentations.

The key is that these projects need to focus on developing, testing, and implementing solutions, and iterating based on learning. Katie Evans, formerly Deputy Head of People for KPMG EMEA, who ran these types of programmes at KPMG, together with London Business School, said: "We called them value creation experiments, because they are much more than the traditional action learning approach of analysing and reporting back. Teams have to develop hypotheses and prototypes, test and learn from success and failure." It's not just action learning – it's *action doing*.

Often there will be multiple projects running in parallel. The results of action learning can help the executive team choose which ventures to invest in, in order to maximise returns. Successful projects become part of the organisation's strategy, and can provide the next leadership role for those who are involved – so they can essentially define their next role.

> ## CASE NOTES
>
> - Siemens' Future Land programme brings people together to work on digital projects. The workshops run for two days, in the style of a hackathon. Attendees from across all levels of the leadership population self-select. Participants can propose projects and choose the ones they want to work on. Projects that generate sufficient interest progress and can receive funding. There's a vote at the end of the programme and the most promising projects are further developed within the business. A number of projects have successfully progressed into real business opportunities.
>
> - In Spain, Bupa has used action learning as a framework for launching multiple new ventures in the business. Some 40 high-potential future leaders take part in a year-long programme for one to two days a week, partnering with senior leaders in the business to work on strategy development. As part of this, Bupa invites external start-ups to pitch for funding. The programme participants work with the start-ups that secure funding to build the business and in so doing learn about how to set up and run a digital venture. The programme allows new ventures to be hot-housed and successful projects are integrated into the existing business.
>
> - Other organisations are building partnerships with start-ups that not only open up opportunities to invest in emerging businesses, but also enable leaders to gain experience that would be more difficult for them to acquire within the organisation. For example, a global bank has developed partnerships with Fintech companies, which can include appointing a senior executive from the bank to sit on the startup's board. This creates an opportunity for executives to acquire critical experiences of leading digital businesses that can help prepare them for enterprise-wide roles. Our partnerships with Fintechs are an opportunity for executives to acquire critical experiences of leading digital businesses that will help prepare them to make that step."

In Chapter 2 we discussed how the proliferation of agile development methods is changing the ways work gets done in modern organisations. They may also make it easier to run these types of action learning projects, as it becomes the norm for people to work across a number of different projects at any time. Policies such as Google's 20 Percent Time (where employees are encouraged to develop 'side projects' in addition to their regular work) can also help.

"Perhaps in a simpler world where the work was repetitive and predictable ... continual growth was less necessary to success. But now, when the growth of the capacities of your team could be the best competitive edge your organisation has, weaving development into the warp and weft of your work really matters."

Garvey Berger and Johnston, 2015

DESIGNING EFFECTIVE ACTION LEARNING INTERVENTIONS

The results of action learning can be hit or miss. Successful action learning projects share similar characteristics.

• They must be meaningful and directly linked to key business imperatives, not just 'make-work'.

• They must be sufficiently stretching and open-ended to allow for a range of potential solutions.

• There must be active sponsorship – and regular input – from senior management.

• They need to be supported by a process that helps people identify what they're learning as they go along, which might include building in opportunities and support for reflection and consolidating learning, such as through coaching and education.

• They should lead into job assignments that build on the skills developed, so the learning is perpetuated once the project is complete.

• They should follow through into pilots and initiatives with organisational owners to test the viability of actionable insights from the learning process.

4. BUILDING THE CAPACITY OF INDIVIDUAL LEADERS TO DEAL WITH COMPLEXITY

One of the essential features of the business context leaders have to contend with these days is *complexity.* The nature of a complex environment is that the outcomes of a particular action cannot be predicted. Leadership in complexity becomes more about understanding multiple perspectives and balancing seemingly irreconcilable polarities, rather than providing definitive answers. The implication for leaders is that their individual capability to handle complexity has to match the complexity of the context within which they operate. Some of the organisations we interviewed are using this concept as the foundation for leadership development.

CAN ADULTS INCREASE THEIR CAPACITY TO DEAL WITH COMPLEXITY?

Experts in adult development theory such as Robert Kegan and William Torbert contend that a leader's capacity to handle complexity has to match the complexity of the situation: the more complex the environment they have to lead within, the higher level of mental complexity a leader needs to have attained. Torbert found that the higher the leader's stage of mental development, the more effective he or she was likely to be at leading transformational change.
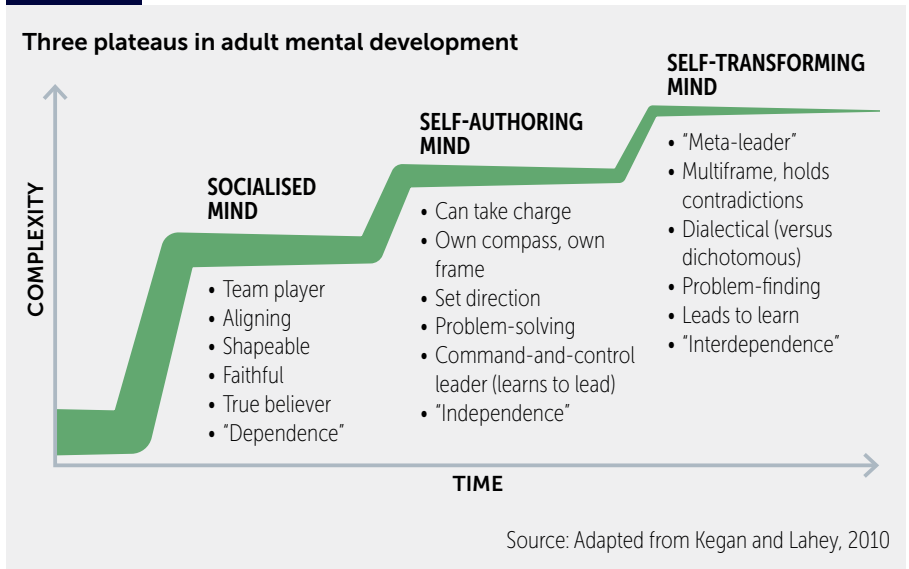
Contrary to the received wisdom that cognitive development stops once someone reaches their mid-twenties, Kegan discovered that an individual's ability to deal with complexity can continue increasing into old age. His research has identified three main stages that adults can progress through. See Figure 16 on following page.

1. ***Socialised mind.*** Most people reach this level, where they fit in with the expectations of their surroundings – their employer, for example. What they think and say is influenced by what they believe others want to hear. They can be a good team player or individual contributor.

2. ***Self-authoring mind.*** A much smaller proportion of people reach a level where they develop their own ideology or 'seat of judgement', which allows them to craft their own identity. Their sense of self is aligned with their own belief system, personal code and values. They can take stands and set limits in response to their internal 'voice'. Kegan suggests this transition is necessary for people who are required to take on leadership roles, which involve exercising independent judgement.

"We are seeing a trend towards leadership development becoming more individualised with a heavy emphasis on coaching. It's taking models of authentic leadership and bringing them up to date for the digital age."

Global Head of Learning,
Financial Services

FIGURE 16

Three plateaus in adult mental development

SOCIALISED MIND
- Team player
- Aligning
- Shapeable
- Faithful
- True believer
- "Dependence"

SELF-AUTHORING MIND
- Can take charge
- Own compass, own frame
- Set direction
- Problem-solving
- Command-and-control leader (learns to lead)
- "Independence"

SELF-TRANSFORMING MIND
- "Meta-leader"
- Multiframe, holds contradictions
- Dialectical (versus dichotomous)
- Problem-finding
- Leads to learn
- "Interdependence"

COMPLEXITY

TIME

Source: Adapted from Kegan and Lahey, 2010

3. **Self-transforming mind.** A very small minority reach this level. They have their own ideology, but can step back from it and see its limits objectively. They can hold contradictory positions in their thinking and no longer feel the need to gravitate towards a polarised view. Abilities such as strategic thinking, systems thinking, comfort with ambiguity and collaboration become more pronounced at this level.

The transition between levels does not happen automatically. People of similar age and educational background can be at different stages of psychological development. Research has shown that the majority of adults (58%) do not progress beyond the socialised mind, and less than 1% achieve the level of self-authoring mind. In one study, only half of the promising middle managers tested had achieved self-authoring level.

There are a number of implications for leadership development.

- Evidence has shown a positive correlation between mental complexity and leadership competence (as measured by factors including ability to inspire a vision, manage conflict and build relationships). So leaders who have achieved higher levels of mental complexity are likely to be more effective in environments characterised by rapid change and ambiguity.

- Kegan's view is that the challenges of an ever more complex world require a greater complexity of mind to make sense of it and develop workable solutions. "There may have been a day when it was enough for leaders to develop worthy goals … cultivate alignment around them, and work to keep organisational performance within the range specified. Skilful as such managers may be, their abilities will no longer suffice in a world that calls for leaders who can not only run but also reconstitute their organisations … in an increasingly fast-changing environment." (Kegan and Lahey, 2009).

- An organisation can go only as far as the level of capability of its leaders. Kegan says: "Leaders need to ask if their current level of capability is sufficient for the degree of complexity of what they want to achieve, and if not, what they can do to develop the capability they need."

- Kegan suggests leadership development should be oriented towards helping aspiring leaders move up the levels of complexity. "Just imagine how much more powerful the work of leadership development would be if it were anchored in what we now know about fostering the development of the meaning-making self in adulthood."

The Cynefin framework
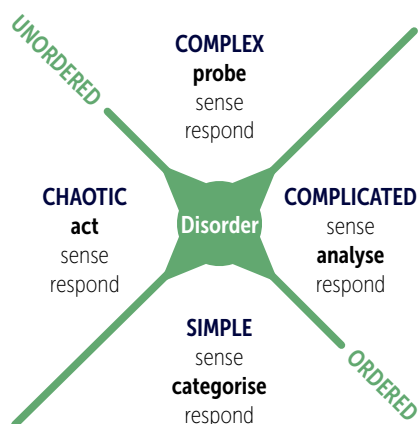
Source: Adapted from Snowden
and Boone, 2007

CYNEFIN – A FRAMEWORK FOR MAKING SENSE OF COMPLEXITY

Several companies we interviewed teach leaders how to use the Cynefin framework to identify complex problems that might require 'adaptive' styles of leadership, as opposed to merely 'complicated' situations that can be resolved with existing knowledge. According to David Snowden, who developed the framework, Cynefin (pronounced ku-nev-in) is a Welsh word that signifies the multiple factors in our environment and experience that influence us in ways we can never understand. See Figure 17.

The framework distinguishes between situations that are predictable and unpredictable. It further divides the issues faced by leaders into five contexts defined by the nature of the relationship between cause and effect. Each context requires leaders to adopt the style and approach to problem-solving that's most suitable to that situation. According to Snowden: "Using the Cynefin framework can help executives sense which context they are in so they can not only make better decisions but also avoid the problems that arise when their preferred management style causes them to make mistakes." Figure 18, on the following page summarises the characteristics of each context and appropriate leader responses.

The idea that leadership development can help leaders increase their capacity for handling complexity has a number of practical implications for the design of leadership interventions.

- Leaders at similar levels in the organisation hierarchy will most likely be at different stages of development and have different personal challenges. This requires programmes to be customised to individual needs, and is likely to include significant elements of individual diagnosis and coaching. For example, as part of its programme design for senior leaders, KPMG encourages participants to design 'personal leadership experiments', where they identify specific behaviours they want to change, experiment with practising different behaviours when those situations arise, and report back to their cohort on the outcomes and what they learned. Some of the organisations we interviewed get learners involved as early as possible in programme design, so that they effectively co-design the interventions they participate in.

- It may be necessary to rethink how cohorts are put together. EY is experimenting with multi-level cohorts for some of its leadership programmes, as a way of better aligning development with specific business needs and also of fostering collaboration and building networks across the firm.

- Getting the right match between coach and learner is essential. Coaches need to have deep expertise in helping leaders grow in psychological maturity. Coaches need to be at least at the same or a higher level of psychological maturity than the leader they are supporting.

- Highly customised programmes tend to be expensive, which may require resources to be diverted from other leadership initiatives.

FIGURE 18

Decisions in Multiple Contexts: A Leader's Guide

	THE CONTEXT'S CHARACTERISTICS	THE LEADER'S JOB	DANGER SIGNALS	RESPONSE TO DANGER SIGNALS
SIMPLE	• Repeating patterns and consistent events • Clear cause-and-effect relationships evident to everyone; right answer exists • Known knowns • Fact-based management	• Sense, categorise, respond • Ensure that proper processes are in place • Delegate • Use best practices • Communicate in clear, direct ways • Understand that extensive interactive communication may not be necessary	• Complacency and comfort • Desire to make complex problems simple • Entrained thinking • No challenge of received wisdom • Overreliance on best practice if context shifts	• Create communication channels to challenge orthodoxy • Stay connected without micromanaging • Don't assume things are simple • Recognise both the value and the limitations of best practice
COMPLICATED	• Expert diagnosis required • Cause-and-effect relationships discoverable but not immediately apparent to everyone; more than one right answer possible • Known unknowns • Fact-based management	• Sense, analyse, respond • Create panels of experts • Listen to conflicting advice	• Experts overconfident in their own solutions or in the efficacy of past solutions • Analysis paralysis • Expert panels • Viewpoints of non-experts excluded	• Encourage external and internal stakeholders to challenge expert opinions to combat entrained thinking • Use experiments and games to force people to think outside the familiar
COMPLEX	• Flux and unpredictability • No right answers; emergent instructive patterns • Unknown unknowns • Many competing ideas • A need for creative and innovative approaches • Pattern-based leadership	• Probe, sense, respond • Create environments and experiments that allow patterns to emerge • Increase levels of interaction and communication • Use methods that can help generate ideas: Open up discussion (as through large group methods); set barriers; stimulate attractors; encourage dissent and diversity; and manage starting conditions and monitor for emergence	• Temptation to fall back into habitual, command-and-control mode • Temptation to look for facts rather than allowing patterns to emerge • Desire for accelerated resolution of problems or exploitation of opportunities	• Be patient and allow time for reflection • Use approaches that encourage interaction so patterns can emerge
CHAOTIC	• High turbulence • No clear cause-and-effect relationships, so no point in looking for right answers • Unknowables • Many decisions to make and no time to think • High tension • Pattern-based leadership	• Act, sense, respond • Look for what works instead of seeking right answers • Take immediate action to reestablish order (command and control) • Provide clear, direct communication	• Applying a command-and-control approach longer than needed • "Cult of the leader" • Missed opportunity for innovation • Chaos unabated	• Set up mechanisms (such as parallel teams) to take advantage of opportunities afforded by a chaotic environment • Encourage advisers to challenge your point of view once the crisis has abated • Work to shift the context from chaotic to complex

Source: Adapted from Snowden and Boone, 2007

EXAMPLES OF FOCUSING LEADERSHIP DEVELOPMENT ON INCREASING LEADERS' CAPACITY FOR COMPLEXITY

Google

Google's approach to leadership development is based around helping leaders build their capacity to deal with complexity. Stephanie Conway, Organisational Development Partner EMEA, said: "We believe that once you've reached the executive level, you know what you're doing from a subject matter perspective. The focus shifts from improving competency to helping our leaders change their mindset as in their world view, their assumptions and their values. If we can shift how we think about some of our most deeply held assumptions, we can be much more effective at handling the complex situations we find ourselves in."

For Google, leading through complexity means leading according to new rules where cause and effect are not always linear. For example, getting the balance right between creating enough structure in the team so people understand objectives and expectations, while simultaneously creating a space where the team is comfortable with not knowing the answer, and being prepared to experiment and learn. According to Conway: "As a leader you have to help your people feel comfortable in that space of uncertainty and be prepared to let go of telling them what to do."

Google has run a programme for the past two years – Leading in Complexity – which is designed to help leaders make that mindset shift. The programme recognises that the innate ability to balance those polarities varies from person to person, and aims to help people increase their capacity. Google teaches the Cynefin framework described on page 47 to help leaders distinguish between complex and complicated situations. "When you're dealing with complexity, the traditional cause-and-effect view of leadership – I'm the leader because of my technical expertise or my experience, and I know how to solve problems – doesn't work, because complex problems can't be solved with historic knowledge and experience," said Conway.

The Leading in Complexity programme runs for up to a year, and comprises two three-day residential offsites interspersed with group coaching and action learning. Leaders are taught about tools including the Cynefin framework, and participants are taught to use these tools to work through the challenges they face in their business area. The focus is very practical: leaders work through their own challenges with support from their peers.

Attendees are either mixed cohorts or intact teams. According to Conway, for intact teams, the programme can be a powerful OD intervention, which helps them build their effectiveness as a leadership team. "It's a forum where leadership teams can take time away from day-to-day work to reflect, work through business challenges and experiment with different solutions."

More broadly, leadership development at Google has shifted away from classroom-based learning towards a greater focus on experiential learning. For example, taking leaders into organisations that may not have Google's resources, to help them deal with difficult problems. According to Brian Glaser, who oversees executive development at Google: "Classroom-based learning is really important when you're in a situation that's predictable. But it doesn't work in increasingly complex times as we don't have a script for how to handle these novel situations." In preparing its leaders for the future, Google is emphasising self-reflection, expediting trust, getting comfortable with 'not knowing' and greater power distribution.

King

At King, the online gaming company, Trevor Hudson is implementing a strategy for leadership development that's rooted in adult development theory. It's designed to help leaders develop 'organisational wisdom' – that is, to develop their psychological maturity in order to better handle the complex business environment in which they work.

For Hudson the roots of complexity are a combination of the speed of change driven by digitisation coupled with the changing stakeholder landscape. "Leaders these days have to balance multiple stakeholder perspectives, and they have to do this at speed. They can't lead by consensus as it takes too long, but they also can't dictate what to do. They need to bring together the people who've got the best current knowledge on the problem at hand and create a context where they are empowered to flex in response to rapidly changing market demands." This demands psychological maturity, an ability to take multiple perspectives, and skills in listening and facilitating conversations.

However, one of the most significant factors that constrains a team's capacity for fast execution is a leader's willingness to manage their own need for control: "Status and power can get in the way of what leadership needs to do to engender and grow empowered teams."

Hudson's approach to leadership development is focused on helping leaders develop the capacity for effectively balancing multiple perspectives, for empowering people with information, knowledge and context, and for listening in order to get accurate feedback that enables rapid change. "If you think about what we mean by 'wisdom', a big part of it is being able to bring multiple diverse perspectives together," he said.

Hudson is creating a series of interventions that establish a learning environment where leaders are forced to take multiple perspectives. In terms of pedagogic design, there are some elements of teaching leaders tools such as systems thinking and cultural intelligence, but mostly it's about helping leaders make the journey for themselves. "I started off thinking that you needed to teach leaders about the different developmental levels and the journey through these levels, but I realised this is too far removed from the challenges leaders face day-to-day," said Hudson. "So the programme design focuses on personalisation, putting leaders in challenging situations that push them out of their comfort zone, break down the barriers between structured development and the way work is done, and help them understand how they typically react, especially when under stress. Even when the topic is a more 'intellectual' topic such as strategy, it's important we get people to engage in the topic for themselves and explore what it means for them." Part of the design is to provide coaching to help leaders tackle the areas that are sticking points for them, and to hold them accountable for their development.

3.3
DESIGNING LEADERSHIP DEVELOPMENT THAT WORKS

CEO surveys regularly show that developing future leaders is a top priority for executive teams. This is reflected in the amounts that organisations spend on leadership development: estimates put global annual leadership development spend in the tens of billions of dollars. However, survey after survey shows that levels of satisfaction with the quality of leaders and the effectiveness of leadership development are low. CRF's 2015 research report *Leadership Development – Is It Fit for Purpose?* found less than one-third (31%) of respondents rated their ability to develop leaders as 'good' or 'excellent', and many other surveys find satisfaction levels to be much lower.

In her 2018 book *Professionalizing Leadership,* Professor Barbara Kellerman, a leading expert in leadership at the Harvard Kennedy School, offers a stark assessment of the state of the leadership industry: "Despite the now countless leadership centres, institutions, programmes, courses, seminars, workshops, experiences, trainers, books, blogs, articles, websites, webinars, conferences, consultants and coaches claiming to teach people – usually for money – how to lead, there [is] scant evidence that this enormous investment of time and money [has] paid off."

While there are no simple solutions to this challenge, there are some fundamental principles that leadership development experts can follow to maximise the business impact of their investment. Here we briefly recap on some of these principles, which are explored in greater depth in our 2015 *Leadership Development* report mentioned above.

These recommendations can be applied to any leadership development strategy. However, they are particularly pertinent to the challenges of developing people to lead through digital disruption, given the challenges this poses to the sustainability, or even survival, of the business.

1. **WE NEED GREATER CLARITY ABOUT WHAT OUTCOMES WE ARE TRYING TO DRIVE THROUGH LEADERSHIP DEVELOPMENT**

Leadership development and business strategy should be closely intertwined, but in our experience they usually aren't. We need to be clear about the business questions we are trying to answer through leadership development, and how we will measure whether the required outcomes have been achieved. In a fast-changing business context, it's also important to recognise that what we need from leaders is evolving at a similar pace, so leadership development has to keep up.

2. **LEADERS DEVELOP THROUGH EXPERIENCE, PROVIDED THERE ARE VEHICLES TO DISCERN AND EMBODY NEW INSIGHTS**

Leadership development has to recognise that, while formal leadership development programmes may be helpful, the only real way to develop as a leader is through on-the-job experience. Seminal research by Morgan McCall and colleagues found that successful executives consistently identify certain types of experience that were pivotal in their development. See Figure 19. They found that job assignments, bosses and hardships played the most pivotal roles.

FIGURE 19

Key Development Events

SETTING THE STAGE
• Early work experiences
• First supervisory job

LEADING BY PERSUASION
• Project/taskforce assignments
• Line to staff switches

LEADING ON LINE
• Starting from scratch
• Turning a business around
• Managing a larger scope

WHEN OTHER PEOPLE MATTER
• Bosses

HARDSHIPS
• Personal trauma
• Career setback
• Changing jobs
• Business mistakes
• Subordinate performance problems

Source: McCall *et al,* 1988

> "Leadership development has become less about academic offerings and more driven by the needs of individuals. This means refocusing our spend: it's less about sending people to business schools and more about building a faculty of mentors and coaches to help individuals with their specific development needs."

Simon Linares, Group HR Director, Direct Line Group

It's not possible to plan every experience, but organisations can design processes to help leaders build the right types of experience at the right time in their career, and provide support such as coaching and formal development to help them learn from those experiences. In general, job assignments can be made more developmental, if organisations focus on this as a priority.

3. DESIGN OF LEADERSHIP DEVELOPMENT INTERVENTIONS NEEDS TO BE BASED ON THE PRINCIPLES OF ADULT LEARNING

There is often a gulf between what we understand about how adults learn, and the application of that understanding to leadership development practices.

- **It takes many years of deliberate practice to achieve mastery.** The typical 'sheep dip' approach we see in many organisations – send leaders to a business school, or run an internal programme, perhaps with some coaching and/or action learning thrown in – will not suffice. According to Conger and Benjamin: "[Creating] new generations of leaders ... takes enormous persistence and commitment ... [and] requires a fundamental understanding that leadership development is a never-ending process, and that it must involve all levels of an organisation."

- **Learning has to be highly relevant to a person's job.** Adults learn best when they can apply and practise what they've learned. The traditional programme-based approach to leadership development can end up with one-size fitting no-one. A key challenge to address in designing effective leadership interventions is to reduce the distance between learning and work, and to embed learning in day-to-day performance. Opportunities for practice can be crafted in many ways: options including stretch assignments or project roles, secondments or action learning can be crafted into existing roles.

- **Learning has to engage the learner.** Learning is both a rational and an emotional experience. Recent discoveries in neuroscience confirm that the highest quality learning engages the whole brain (see box on the neuroscience of learning on the following page). It's also important to help learners understand how to learn and how they can improve through reflection, practice and repetition. This might mean giving learners practical tools and checklists they can use to aid reflection, or using apps that 'nudge' people to establish new habits.

> "It takes years to learn how to lead or, at least, to learn how to lead wisely and well. It takes, among other things, education and training, practice and experience, reflection and maturation."

Professor Barbara Kellerman, Harvard University

KEY PRINCIPLES OF ADULT LEARNING

Malcolm Knowles was, in the second half of the 20th century, one of the central figures in the development of understanding of adult learning. He identified six principles that underpin how adults learn.

1. Adults need to know *why* they are learning something.

2. They learn through doing.

3. They need to be responsible for their decisions on education and involved in planning and evaluating learning.

4. They learn most from subjects that are immediately relevant to them.

5. Their learning is oriented towards problem-solving rather than content or theory.

6. They respond better to internal than external motivators for learning.

"Leadership development requires a shift in mindset from event-driven 'training' to development that is collaborative, continuous and community-based. Interventions need to be joined up into a long-term leadership development journey, which incorporates setting expectations, integrating with strategic business initiatives, encouraging self-reflection, being exposed to new thinking and environments, and focusing on long-term behaviour change through deliberate practice."

Lisa Lyons, Principal, Leadership and Assessment Market Lead, Mercer

THE NEUROSCIENCE OF LEARNING

Recent advances in neuroscience are giving us a better understanding of what happens in the brain when we learn and, therefore, how to design more 'brain-friendly' learning. One of the most important discoveries of the past 30 years is neuroplasticity: conventional thinking held that neural development stopped in young adulthood, but we now know that the brain is plastic and capable of change even through adulthood. Learning affects the brain in one of two ways: altering existing neural connections or creating new ones. When we put into practice new things we have learned, the brain is reorganised to take in new data and, if it is useful, retain it. Every time we practise a new behaviour we reinforce new neural pathways.

Traditionally it was thought that learning was a rational process, focused in the brain's prefrontal cortex. Now we understand that learning happens all over the brain, and engages emotions as well as logic. It is therefore important to engage as much of the brain as possible in learning – through stimulating different senses and emotions.

The latest brain research offers some practical takeaways.

1. *Less is more.* Focusing on a smaller number of concepts in one sitting, and creating space for people to reflect, practise and apply what they have learned to different problems tends to be more effective than bombarding people with lots of different ideas.

2. *Engage the learner's motivation.* Get people to think about what they will be able to do as a result of learning or how it will help them achieve other goals.

3. *Practice and repetition.* New neural pathways are built and maintained through repeated use. Rewiring the brain also means 'forgetting' old behaviours – so get people to think about the things they might do that would lead them back into an old way of behaviour, and help them develop strategies for what they would do if they found themselves slipping back.

4. *Make the learning environment feel more like the work environment.* When learning happens outside the normal run of work, it's important to connect it as closely as possible to the experience of real work. For example, get people to imagine what sorts of barriers they will encounter when they try out new skills, and to plan for how they will overcome them.

5. *The brain needs time and space to embed learning.* Neuroscientist Dr. Tara Swart recommends a spaced learning method in which highly condensed learning content is repeated three times, with two ten-minute breaks filled with activities such as exercise.

   Creating opportunities for reflection without distraction is also valuable.

6. *Learning approaches that engage multiple senses are likely to enhance learning.* Stimulating different parts of the brain simultaneously generates greater brain activity. Visualisation and mental imagery engage the brain in a very similar way to real-life practice. Using video and other media, stories, humour and experiential learning may increase the effectiveness of learning. Recently discovered 'mirror neurons' show that, as well as learning from doing something yourself, you can also learn from observing others, or even imagining yourself doing it.

7. *Making the experience emotionally engaging enhances learning.* Emotion and cognition are not neatly divided in the brain, and virtually all mental activities involve both.

8. *The brain functions better when we exercise, eat well and stay hydrated.* Sleep is also critical, as that's when the mind synthesises information. A good idea is to allow people to 'sleep on it' and recap the following day.

9. *Creating opportunities for people to make meaning of what they've learned* and apply it in their own way is beneficial, as is helping learners to tap into their prior knowledge and experience and make new connections. This can be done through storytelling, making comparisons or drawing analogies.

10. *Teaching learners about how the brain works* and helping them to consciously adopt effective learning strategies can increase their capacity to learn.

"Learning is becoming more and more personalised and self-directed, and leadership development is becoming virtual. It's easier for global organisations to scale learning, but you have to be careful that moving away from skills-based to content-based training doesn't leave you with leaders who understand leadership intellectually but don't actually know how to do it in practice."

Chris Humphreys, CEO, APS, Hogan Assessments Distributor UK

TECHNOLOGY AND LEADERSHIP DEVELOPMENT

One of the principles of effective adult learning is that, to make learning stick, we need to maximise the integration between learning and day-to-day work, and minimise the gap between learning and practice. Over recent years we have seen an explosion of learning platforms and technologies that give learners access to tools and resources, at their own instigation and in their own time.

The rise of 'curated' learning platforms, mobile learning, online social learning and apps that help people track behavioural change are helping to integrate learning into day-to-day work. Here are some examples.

- Learning platforms such as Degreed, which use artificial intelligence to predict relevant learning content and connect learners on social media, are becoming more widely deployed in organisations.

- Collaboration tools such as Slack, WhatsApp and Facebook Workplace are making it easier for people to participate in peer-to-peer learning and build virtual learning communities. Often this is happening organically. "We didn't roll out Workplace specifically as a learning tool," said Rosie Mackenzie, Global Talent Head of Leader and Enterprise Development, AstraZeneca, "but that's how people are choosing to use it."

- Increasingly, we are seeing learning tools such as online coaching platforms being integrated with the tools that people use for day-to-day work. This reduces friction between learning and application, removes the need to log into a separate LMS, means the tools are more likely to be used, and allows for data capture and performance tracking.

- More and more formal development programmes have gone virtual, making it easier to incorporate learning into the daily work routine and provide the same learning experience for global leadership cohorts. For example, GSK now delivers first and second line leadership development in a virtual social classroom. Delivering learning virtually doesn't necessarily cost less, but can increase the effectiveness of learning, according to Kim Lafferty, VP Global Leadership Development. "You need a higher facilitator-to-learner ratio, and you have to invest to get the virtual environment right. The great benefit, however, is that the application happens immediately. It gives people the opportunity to learn, absorb and apply much faster."

- Coaching is increasingly being delivered virtually, which is allowing it to become more scaleable, and to be available to more junior people. Tools such as Saberr's Coachbot offer digital coaching via chatbot, removing the need for a human coach, and the new coaching tools incorporate analytics and behavioural tracking to monitor the impact of coaching. For example, EY is experimenting with a virtual coaching platform that captures coaching conversations and uses AI to pull out recurring themes, diagnose learning needs, and take a read on organisational climate.

- The latest employee engagement tools such as Glint allow leaders to track their team's engagement and get feedback in real time about their performance as a leader.

See CRF's 2017 report *Learning – The Foundation for Agility and Sustainable Performance,* for more about trends in learning technology.

"I think of leadership …
as a system … with three
parts: leaders, followers
and contexts. Each of the
three parts is of equal
importance – which, in turn,
has implications both for
teaching how to lead and for
learning how to lead."

Professor Barbara Kellerman,
Harvard University

4. **LEADERSHIP DEVELOPMENT HAS TO ALIGN WITH WHAT'S HAPPENING IN THE BROADER LEADERSHIP 'SYSTEM'**

Leaders don't lead – or grow – in isolation. It's impossible to develop leaders without taking into account the system within which they have to apply what they learn. Any investment in leadership development that fails to take account of the broader leadership system is likely to deliver a sub-optimal return.

Professor Barbara Kellerman, who's an outspoken critic of what she calls the leadership 'industry', argues that one of the reasons that leadership development is falling short is that it is overly focused on individual leaders, with insufficient focus on the system within which leaders operate. Kellerman argues that there are three elements to the leadership system that need to be kept in balance: the leaders themselves, the context within which they operate, and those who follow leaders. Leadership development needs to take account of all three, rather than focusing purely on individual leaders.

CONTEXT

1. Choosing the right leaders to develop

Our chances of developing effective leaders for the digital age will be much higher if we make good choices around who to invest in. Whether leaders are born or made is an age-old question. Genetic research (See Arvey *et al,* 2006) suggests that around 30% of leadership capability can be attributed to our genes, which leaves 70% to play for. The problem is, we don't necessarily understand how to effectively develop the other 70%. According to Tomas Chamorro-Premuzic (2019): "We are much better at predicting than boosting leadership performance. If we want an animal to climb a tree, we are better off finding a squirrel than training a fish."

When AT&T pioneered leadership assessment and development centres in the 1970s, it measured the relative impact of training and talent on leadership effectiveness. It found that leadership effectiveness was highly predictable, and individuals' rank order after training did not substantially change. Anyone who has tried to stick to a diet will know that even small changes to behaviour require a great deal of time, effort and commitment. By focusing in the first place on selecting leaders who demonstrate criteria that have been shown to predict leadership effectiveness, we increase our chances of identifying the right leaders to invest in.

Decades of psychological research have resulted in a degree of consensus around a core set of factors that predict those people who are likely to succeed in leadership positions of greater responsibility and complexity. These are intelligence, certain aspects of personality such as conscientiousness and openness to experience, and motivation. For a more in-depth discussion on how to identify high potential future leaders, see CRF's 2016 research report *Assessing Potential.*

Chamorro-Premuzic, whose research has sought to identify the features that distinguish successful leaders in the digital age, suggests we should additionally prioritise the following characteristics.

- Strong entrepreneurial skills; capable of driving innovation and change.
- Curiosity; willingness to look outside their own organisation or field of reference for ideas.
- Coachability; demonstrating a capacity for learning new skills.

Another factor to consider is learning agility, which has gained currency over recent years. This is defined as the ability and willingness to learn from experience, and then to apply that learning to perform successfully (De Meuse *et al,* 2017). In a business context where leaders can't necessarily solve business

FIGURE 20

The Leadership System
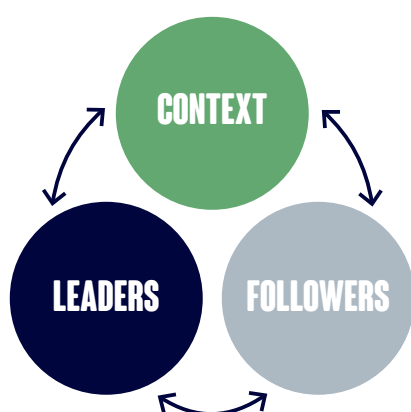
> "Leaders will be much more likely to improve when they have been correctly selected."
>
> Chamorro-Premuzic, 2019

problems by relying on what has worked in the past, this capability is likely to become more important. Garvey Berger and Johnston argue that leaders who are most likely to succeed in times of disruption are those with high capacity for growth, and hiring criteria should focus on identifying them. "We are not arguing that organisations who are interested in growth should hire people who aren't smart," they say. "Rather, we believe that organisations need to hire people who are smart and also who have learned to – or are willing to learn how to – learn from their mistakes."

Our research found that some organisations are updating their criteria for assessing leadership potential – often through amending their leadership competency models. Others are rethinking how they conduct talent reviews and succession planning to make sure the criteria and agreed development actions reflect the work that needs to be done to develop digital capability among the leadership population. Here are some examples.

- Royal Philips is experimenting with running talent reviews specifically for digital leaders. This began as a focus on critical talent with scarce technical digital skills, but is now expanding to identify future enterprise leaders with strong digital business skills.
- Another interviewee added a 'digital leader of the future' lens to its process for identifying likely successors for executive committee roles. This includes assessing how well leaders are embracing agile working, driving innovation, working at pace, able to foster collaboration and work across boundaries, lead inclusively, and balance speed and quality, as well as their degree of technology savvy. The company is collating data across the leadership population to identify key skills gaps and work out priorities for action.

> "Leaders who are prepared to be adaptive, open-minded, curious, always learning, always looking to reinvent will continue to fare well."
>
> Lynne Weedall,
> Group HR Director, Selfridges

2. The work context has to support the behaviour change that leadership development is seeking to achieve

Does this scenario sound familiar? A leader returns from a great development programme, feeling engaged and enthusiastic, equipped with new skills and keen to put them into practice. However, a couple of months later, nothing has changed, because the leader hasn't been able to put the learning into practice and has quickly forgotten what they learned. Some leadership commentators liken this to putting a clean fish back into a dirty tank: "Teaching individuals to be great leaders without reference to the environments in which they lead has minimal impact. … You can take the leader out of his organisation and give him new skills, but when you plunge him back into the organisation, the learning doesn't stick. The clean fish gets dirty again soon enough." (Sullivan, Philpot and Meeks, 2014).

Similarly, trying to help leaders build different mindsets while failing to attend to the organisation culture is likely to be a waste of resources. For example, teaching leaders to be more collaborative while leaving a top-down organisational culture unchanged.

You have to fix the context (organisation culture, management processes, organisation design) first before tackling individual leader development. According to Beer *et al* (2016): "The widely embraced development model doesn't acknowledge that organisations are systems of interacting elements: roles, responsibilities and relationships are defined by organisational structure, processes, leadership styles, people's professional and cultural backgrounds, and HR policies and practices. And it doesn't recognise that all those elements together drive organisational behaviour and performance. If the system does not change, it will not support and sustain individual behaviour change – indeed, it will set people up to fail."

> "The [leadership] industry must focus on improving the capabilities of the leadership system, not simply the competencies of the individual leader."

Professor Tony O'Driscoll, Duke University

It's also important to take into account the ecosystem around the individual learner, including their line manager and sponsor if they have one. Is their line manager equipped to support them in applying their learning? Is the sponsor able to unlock relevant career opportunities to support their development?

3. Followership

Leaders can only be considered to be leaders if they have followers – that is, people who are *willing* to follow them. The changing nature of followership is a crucial – but frequently neglected – aspect of leadership. In particular, digital communications and social trends are fundamentally changing the relationship between leaders and followers.

- Much greater transparency of leader performance.
- More virtual working means less face-to-face interaction between leaders and followers.
- The rise of the gig economy means leaders are increasingly called upon to lead people who are not direct employees.
- The balance of power between leaders and followers has shifted significantly over the past decade. Increasingly, leaders can expect to be challenged and held to account by those who work for them.
- This reflects general trends in society, principally a reduction in deference, respect and trust in leaders, the growth of populism, and the growing power of individual consumers as a result of the transparency afforded by social media and the internet.
- Leaders have less authority and positional power and need to lead through inspiration and influence.
- Followers have lost trust and are cynical about the motives of leaders in both public and corporate life.

Indeed, Professor Barbara Kellerman goes so far as to say that leaders have become over-valued while followers are under-valued. "Why do we … invest so much time and so much money in learning how to lead, and nearly no time or money in the obvious obverse, in learning how to follow?" she asks. Kellerman argues that teaching followership should be integral to teaching leadership, in the same way that we would never train a doctor without taking their patients into account.

Yet very few organisations mention followers at all when they talk about leadership development. One notable exception is Goldman Sachs, which now teaches followership as part of its core induction and high potential programmes.

> "In the leadership industry, we have a tendency to overemphasise the individual and underplay the context."

James Fulton, Global Head of Learning and COO, Pine Street Leadership Development Group, Goldman Sachs

04

CONCLUSIONS AND RECOMMENDATIONS

This chapter summarises the conclusions of our research and outlines recommendations for rethinking leadership development to help prepare leaders for the digital age.

TOPICS COVERED

4.1
CONCLUSIONS

"Does all this suggest that leadership is radically different in the AI age? No, but there are two key distinctions. First, leaders' hard skills will continue to be eclipsed by smart machines, while their soft skills will become ever more important. Second, while timeless leadership traits like integrity and emotional intelligence will no doubt remain important, leaders in the AI age need to be humble about others' contributions, adaptable to the challenges that get thrown into their paths, steadfast in their vision of the ultimate destination on this path, and constantly engaged with the changing world around them."

Chamorro-Premuzic *et al, 2018*

We live in an era of digital disruption, characterised by the rise of digital technology, the emergence of new competitors, reshaping of traditional industry rules and boundaries, an accelerating pace of change and increasing complexity. Few industries are unaffected by these trends. For organisations, future success and business sustainability rely on the ability to adapt to these changes.

- Society is changing too. Communications technology which allows us to be connected with any other human being on the planet also means we can be always on. Social media has created a degree of transparency never before seen in history. Technology such as facial recognition can track our every movement, both physical and virtual. This has brought many benefits – the rise of inclusivity and the #MeToo movement have demonstrated the power of social media for good, for example. However, the downsides include eroding of privacy, the rise of the surveillance state in countries such as China, and the possibility for rogue states to manipulate public opinion in other countries.

- Leadership has to evolve in response to the changing context. We identified three key dimensions along which the expectations of leaders are shifting. These are:
  - **How leaders set direction:** from detailed top-down planning to scanning, envisioning and course-correcting in a fluid and fast-changing marketplace.
  - **The organisational infrastructure leaders need to build:** the tools, metrics, processes and underlying culture that enable experimentation, continual feedback and rapid execution.
  - **The new relationship skillsets required:** leading through networks and influence rather than expertise, and leveraging digital communication tools to lead virtual teams.

- However, there is considerable uncertainty about whether the digital business context requires a fundamentally new model of leadership. Are we simply looking at recasting existing models of entrepreneurial or change-oriented leadership? Are we in danger of getting caught up in a hype cycle about leadership in the digital age, while losing sight of what we already know about the fundamentals of effective leadership?

- The picture is much more nuanced than simply concluding there is a single answer to this conundrum. The extent to which individual leaders or organisations will have to adapt to the digital context will depend on the industry they are in, which part of the organisation they sit in, to what extent they are involved in strategic versus operational leadership, and their individual capability, among other factors. Leaders who are responsible for setting strategy, growing their business, innovating, and developing customer relationships are likely to be at the forefront of these changes.

- Leadership development also has to keep up with the changing business context. To date, however, most organisations are still working out what their approach should be. Thus far, organisations have tended to focus on building

> "The nature of the internal discussion has shifted over the last three years away from being predominantly about applying the technology towards the potential of technology as a source of business transformation, and how to build the new mindsets and leadership behaviours we will need to get us there."

Christian Kabusch, Head of Digitalisation and Transformation, Siemens

leaders' awareness of new technologies and the underlying business models, and in helping shift mindsets about the opportunities afforded by the digital economy. Much remains to be done to help leaders build and put into practice the new skills and capabilities they will need to design and implement successful digital business strategies.

- While the business environment is changing rapidly, it's important to recognise that humans don't change so fast. Although technology is playing an ever greater role in learning delivery, this will only get us so far. The principles of adult learning that should underpin any well-designed leadership development strategy have not changed. Leadership development and business strategy should be closely intertwined, but often aren't. We know that adults learn through experience, mastering leadership requires years of deliberate practice, learning has to be relevant to the job, and individuals have to be motivated to apply what they learn.

4.2
RECOMMENDATIONS

1. **Start with the strategy.** As with any leadership intervention it's essential to start with the business strategy and key priorities. What's the business problem you are looking to solve, by investing in digital leadership? In what ways does the future success of your organisation depend on building digital leadership capability? What are you not doing today that you should be? Can you articulate the ways in which the proposed intervention will address the relevant business issues? While it may be tempting to focus on digital leadership as the 'latest thing', is it really the top priority for leadership in your organisation? What is the general quality of leadership and are there ways in which it can be improved?

2. **Define the gap.** Conduct a proper needs analysis to identify the nature and size of the requirement so you can customise your approach to what the organisation needs at a given point in time. Identify pockets of capability that you can build on. How do learning needs differ by level of seniority, business unit or function? This will help answer questions such as: "Do we start at the top and cascade down, start in the middle, or take a bottom-up approach? Are there very specific needs that apply to a smaller population of leaders, or do we need to do something for everyone?"

3. **Align learning and business strategy.** Pair formal learning interventions with work experiences that solve real organisational problems. This might include permanent job moves, or project business challenges that you can use as a springboard for developing digital leadership talent.

4. **Get the basics right.** Make sure learning interventions are designed on the basis of adult learning principles. Engage leaders' line managers and sponsors so they can support their people to apply the learning in practice. Use relevant digital tools to support knowledge acquisition and to embed behaviour change.

5. **Build or buy?** How developable are the capabilities you're focusing on? Is it more effective to develop from within or bring key talent into the organisation? Are you clear about where you are prepared to invest in developing capability? Would making targeted business acquisitions help you realise your digital strategy?

6. **Update leadership and talent frameworks.** Do your criteria for identifying high potential future leaders or your selection criteria for hiring leaders from outside adequately address the need for digital leadership? Do you consider the need for digital leadership capability when reviewing succession plans?

7. **Make sure other elements of the leadership 'system' are consistent with the outcomes you are looking to achieve.** Is the organisation design consistent with your stated intentions, for example are you preaching a message of empowerment while maintaining tight central control? Does the organisation culture support or hinder behaviours such as experimentation or empowerment? Do reward and performance management systems foster the behaviours you are looking to develop? Are you clear about how the expectations of followers are changing? Is this adequately addressed in your leadership development strategy?

8. **Consider how you will evaluate the impact of your actions.** Work out before you start what the key objectives are, and how you will measure outcomes against them. Establish a baseline against which to track performance. Design the evaluation before you begin delivery. Identify key stakeholders and develop a plan for getting their input and keeping them informed.

05

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