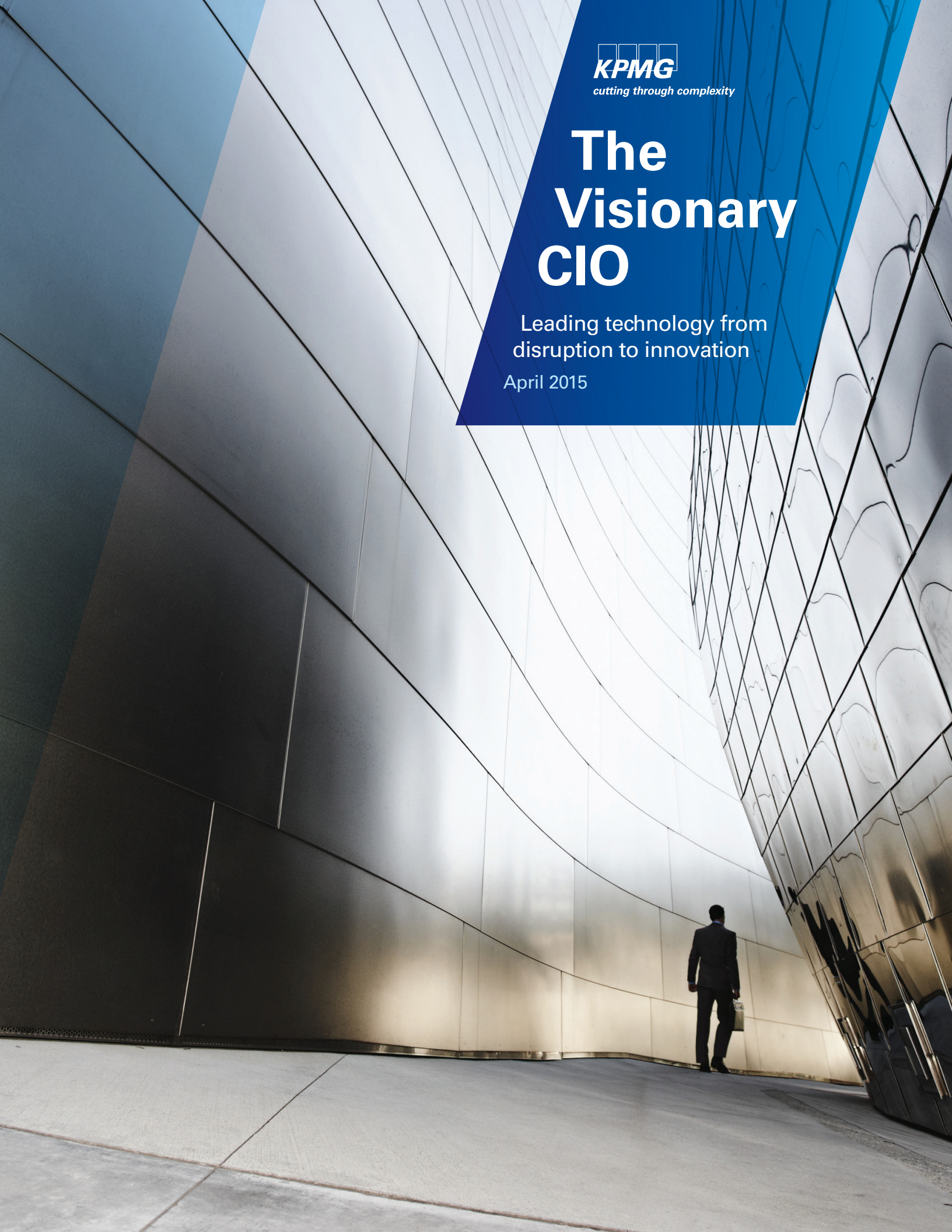KPMG
cutting through complexity

The Visionary CIO

Leading technology from disruption to innovation

April 2015

Foreword

There is no doubt that digital technologies are opening up new ways of relating to customers and new ways of doing business. It is also true that, if organizations are to exploit technology to deliver real business value, they need to take brisk and purposeful action, because competition is fierce.

However, it needs to be the right action, in the right direction. This white paper offers some reassurance and practical advice that could help you, the CIO, steer your organization successfully (and reasonably serenely) through the rapids of technology innovation.

The pace and impact of digital innovation can be unsettling. It appears that nothing is sacred – least of all traditional business models. However, while the potential is hugely exciting, it's not so much the technology itself but what you do with it that matters.

That's exactly why we see an expanding role for the CIO who is prepared to be the evangelist for innovation in the C-suite. Visionary CIOs are inspired by the potential opportunities of new technology, but also maintain a firm grip on the realities of the big business picture. They can balance and accommodate the demand for innovation, while keeping the wheels turning with existing customers and processes. It is these pragmatic champions of innovation who will drive the enterprise forward.

> **"** CIOs and their IT organizations are at a crossroads where staying the course will most likely lead to marginalization as their business stakeholders turn elsewhere for technology solutions. The other road requires IT transformation to deliver the speed and agility their business users are demanding. This transformation requires IT to adopt new operating models; one where IT shifts its emphasis from building solutions to one that brokers solutions. **"**

Marc Snyder, Managing Director, KPMG CIO Advisory

Tips for the visionary CIO

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#1

Focus on your business

There is one simple question that guides the application of innovative technologies: "What are we trying to achieve as an organization and how can technology help us achieve it?" If you stay focused on your business, your customers and your people, the impact of technology will be positive and decisive. Of course, it is vital to be aware of what your competitors are doing and especially to be vigilant for opportunist entrants to your market. But it's not enough to be a 'me-too' player because part of embracing technology innovation is about doing old things in new ways.

If the impetus for technology innovation focuses on business needs, this implies a new and influential role for the CIO in which the emphasis moves from 'systems provider' to 'enterprise enabler.' The only way to drive effective technology innovation is to understand where you are now, where you want to be and how you need to change. If you start creating digital products and services without an end plan, you are playing dice with the future and the odds aren't in your favor. This is why CIOs need to play a lead role in the creation of a digital vision and technology road map for their businesses.

The companies who are genuinely exploiting the digital revolution are not rushing into Mobile, Cloud, Social and Analytics as passengers on the bandwagon. They are looking at the technology in the context of their own business, their customers and colleagues – and then thinking, what could this do for us? What changes to our business and operating model can be better enabled by technology? Visionary CIOs are building new relationships inside and outside the organization to make it happen.

> " What I like about disruptive technology is that it cuts through the noise. It allows us to do things more creatively, more seamlessly, more independently and at higher value. But while the technology suggests great new ways of doing things, issues like security can dilute or neutralize that potential. Harmonizing these influences is the greatest challenge. "
>
> **Harry Moseley,** CIO KPMG

Think it through

The media is full of stories about the 'new industrial revolution' and companies are eager to sell you their particular version of the future. In this atmosphere, it's natural to feel that everyone else is surging ahead of you. But even the most advanced of the early adopters are still wrestling with the implications of digital innovation, from issues with tax, governance and data security to shortages of talent. The truth is, it takes much longer to adopt new technologies than most people acknowledge.

When the whole world seems to be in the grip of a digital gold rush, it's difficult to take a step back and think. But that's what leaders need to do – especially the visionary CIO. The more hysterical the clamor, the more important it is to come to your own decisions, on the basis of your organization's own issues and priorities. This is why we believe the CIO remains such a central figure in the application of innovation: you alone have the cross-business perspective and technical grasp to align digital possibilities with business imperatives.

Of course, it is important to ask the right questions and engage fellow leaders in the journey. Nonetheless, the CIO is the obvious person to be the C-suite evangelist for technology innovation. That means getting a plan in place – mapping out a digital business agenda and designing a road map to deliver your objectives. And rather than reacting to pressure, you should set the pace. On page 10, we share a simple tool for assessing the 'Digital Business Aptitude' of your organization; this is an excellent starting point for that journey.

> This is about the art of the possible: it means embracing new ways of thinking and rejecting the historical prism. We have to step back and say things like, 'Why not?', 'What would it take?', 'How could we do this?' and, perhaps most important of all, 'Wouldn't this be cool?'

Matt Bishop, Global Managing Principal, KPMG CIO Advisory

#3

Embrace your consumers

As people on the front line have come to expect more of technology, the relationship between IT and business users has shifted. If there's a problem to solve, you can buy solutions directly from external providers. What started with Bring Your Own Device (BYOD) to work is already evolving into Bring Your Own Software (BYOS). However, as the IT function wants to check the security and quality of any new node on their network, they can easily be written off as enemies of progress. If IT always spells NO, the landscape is likely to become increasingly lawless and chaotic.

With a visionary CIO, however, IT can play a proactive role in reaching the full potential of technology to transform the capability of the business. The threats and the risks associated with security, compliance and access haven't gone away, but the true visionaries have changed their position from risk avoidance to risk management. With that shift, it is possible to create a workforce that is hugely more efficient – and capable of providing an enhanced experience to both customers and employees.

Visionary CIOs run IT functions like businesses, embracing consumerization and driving value throughout the organization. The CIO has the insight and overview to create a new landscape that combines high-speed, agile innovation with secure, robust and scalable infrastructure. Rather than fighting to keep up with the competition, you could be setting the agenda for digital evolution and managing the various components, assets and relationships that make it all happen.

> " It's time to treat your workforce as your customer. We need to create experiences that solve their problems. And it's more important to solve small problems really well, rather than provide mediocre solutions to the big ones. But we also want to keep joining the dots between the technologies we deploy and the impact we can have on the business… "
>
> **Dave Wolf,** Managing Director, KPMG Digital

Learn from examples

Technology innovation drives increased sales and revenue at Trane

Because 'digital disruption' is such a hot topic, it's easy to assume that technology is only going to apply to cool new industries with switched-on customers and employees. In fact, the most interesting and profitable business transformations focus on very traditional virtues – such as convenience, choice, speed and value. Whatever your business is set up to do, there is a strong possibility that digital technology could help you do it better.

Understanding the business context

Trane sells premium HVAC systems in residential and industrial markets. In recent years, growth has been sluggish on the residential side and it became clear that the problem was right at the interface with customers – with the dealer network. Dealers were conveying inconsistent messages about the company and its products, and customer service standards did not live up to the quality of the products either.

#4 Learn from examples

Detailed dealer persona development was used to find specific needs and motivators.

Linking relationships to technology

With help from digital and mobile specialist Cynergy Systems (acquired by KPMG in March 2014), Trane took the time to understand their challenges in detail: by carefully profiling dealer behaviors and motivations, they could apply the processing power of digital technology to a deep understanding of the human relationships at the heart of every sale.

Intuitive, guided selling experience.

Innovation that focuses on the customer

The resulting solution makes technology the servant of the customer experience. Trane MAP is an iPad-based application that dealers take on home visits. The system leads the salesperson through a consistent guided sales process, collecting information about the customer's home and identifying the best product package for their house. The system generates an interactive presentation explaining what Trane offers as a company and why the recommended solution is right for that customer. The transaction is personal and immediate: customers see a fully-costed proposal tailored specifically to their home; and because they can sign up immediately, many more do.

#5

Invest in relevant digital skills

Is technology innovation more difficult for established, larger companies than smaller start-ups? You might think that big businesses would have a lot more invested in the kind of legacy infrastructures that reduce agility and hamper innovation. The reality is more complex.

It is true that venture companies like Uber can arrive out of nowhere, with astonishing capability, because digital technologies like Cloud lower the barriers to entry. However, bigger players may find it easier to invest the time and resources to re-think their relationships with customers, colleagues and suppliers. The technology and trends that create such exciting opportunities for entrepreneurs also put radical change within the grasp of established enterprises.
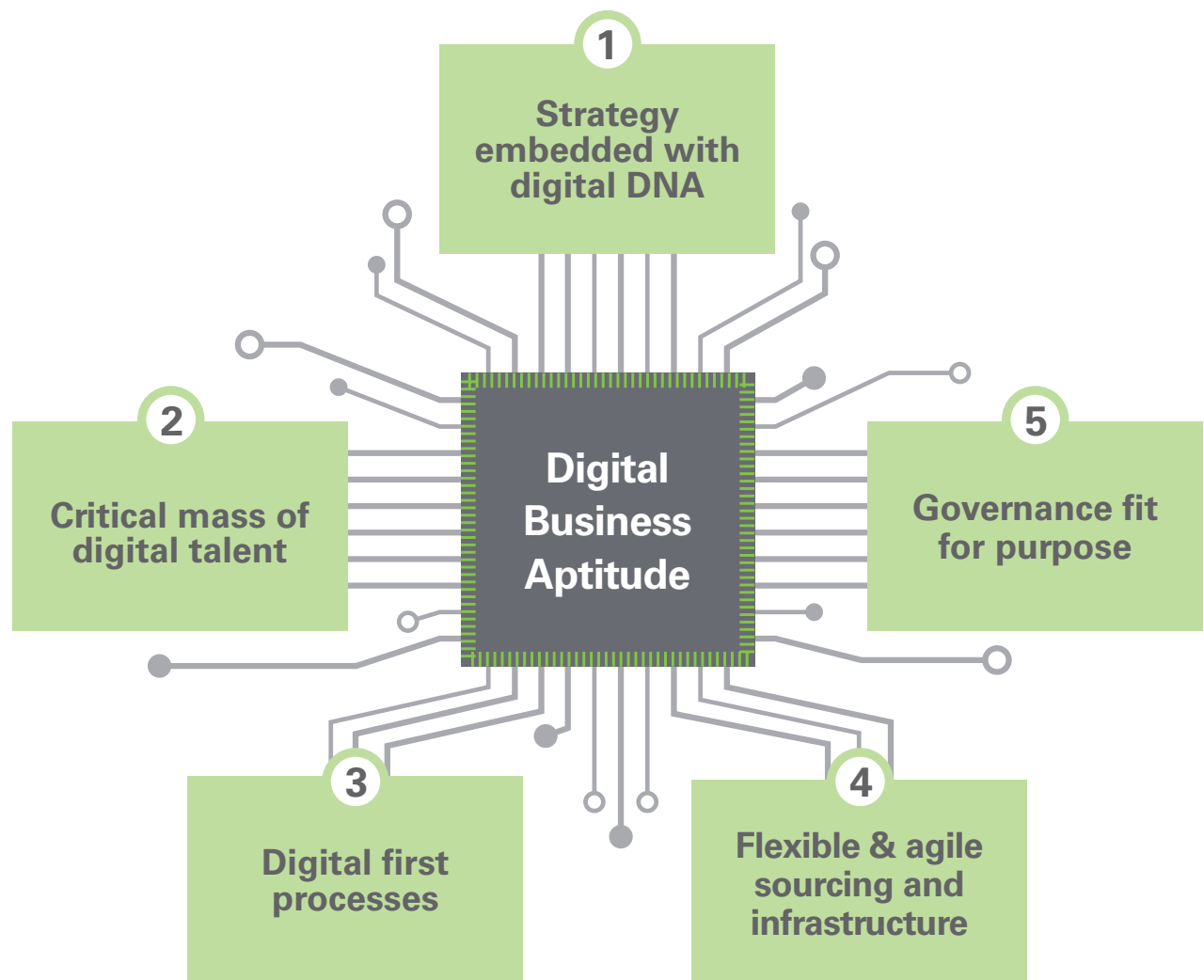
One thing is certainly true for all: there is a severe shortage of people who can conceive, design and build genuinely transformative digital solutions. This implies a need to build digital skills in-house, while also exploring new partnerships with expert and specialist providers in the external market. Some firms have even pursued small acquisitions primarily for their digital talent. For many technology innovators, the turning point has been the funding of an in-house R&D capability: this puts innovation at the top of the agenda and also allows people to 'get their hands dirty' building prototypes and trying out new ideas in a laboratory environment.

This is why a road map for technology innovation can be such a powerful tool: bluntly, if you have a clear understanding of the big picture, you can afford to test new ideas, see what works and then do more of it. Whether you call it prototyping, wedge innovation, proof of concept or fail-fast, 'trying stuff out' is a great way to innovate because reality is the best test-bed. 'Freedom to fail' can trigger remarkable innovations, as long as everyone understands the approach and subscribes to the same vision.

Understand your strengths

We have identified **five key capabilities** that characterize successful technology innovators. You can use these indicators as a diagnostic framework to assess how 'digitally savvy' your organization is right now – and what you might want to do about it.

- **1** Strategy embedded with digital DNA
- **2** Critical mass of digital talent
- **3** Digital first processes
- **4** Flexible & agile sourcing and infrastructure
- **5** Governance fit for purpose

Digital Business Aptitude

Assessing Your Digital Business Aptitude (DBA)

(1) **Strategy embedded with digital DNA**

Because of digital disruption's profound impact on markets, products, services and business models, successful organizations don't have a digital strategy layered on top of their enterprise strategy. Instead, they are often one and the same. The digital strategy is implicit and embedded within the enterprise strategy.

(2) **Critical mass of digital talent**

Digital talent is extremely scarce, so companies need to look at new ways of sourcing and deploying expertise. These can range from strategic partnerships and targeted acquisitions to developing mixed talent pools that integrate internal and external expertise. It may be possible to enhance existing talent by concentrating skills in centers of excellence and digital acceleration teams. A digital business road map will make it easier to identify and fill talent gaps.

(3) **Digital first processes**

Competing successfully as a digital business creates new challenges and expectations. The IT organization can expect to face increasing complexity and the rapid assimilation of new technologies, while managing new risks and operating at a much faster cadence – especially in developing and delivering solutions. User-centric design, flexible and agile development, frequent deployments, and analytics-driven quality assurance processes are indicative of a digital-first approach.

**(4)** **Flexible & agile sourcing and infrastructure**

Conventional infrastructure may be inflexible, complex and limited in capacity. While Cloud offers an obvious solution to these issues, new platforms must be secure enough to protect against cyber-attacks, resilient enough to support 24/7 operations and agile enough to accommodate a huge swing in demand, while supporting automated provisioning.

(5) **Governance fit for purpose**

There is an inherent conflict between the need for speed and the requirement for appropriate controls. Success depends on moving away from extreme risk avoidance towards a more fluid governance process that manages risk while devolving both decision-making and accountability to the point of impact.

The DBA assessment

The DBA assessment provides a practical, real-world indicator of digital maturity; you can use it as a simple self-assessment tool that highlights priorities for change as a business prepares itself for digital evolution. You don't have to score the maximum on every capability to succeed; however, consistently low scores indicate areas of vulnerability that might need attention.

Legend: Strategy | Digital Talent | Process | Sourcing & Technology | Governance

#7
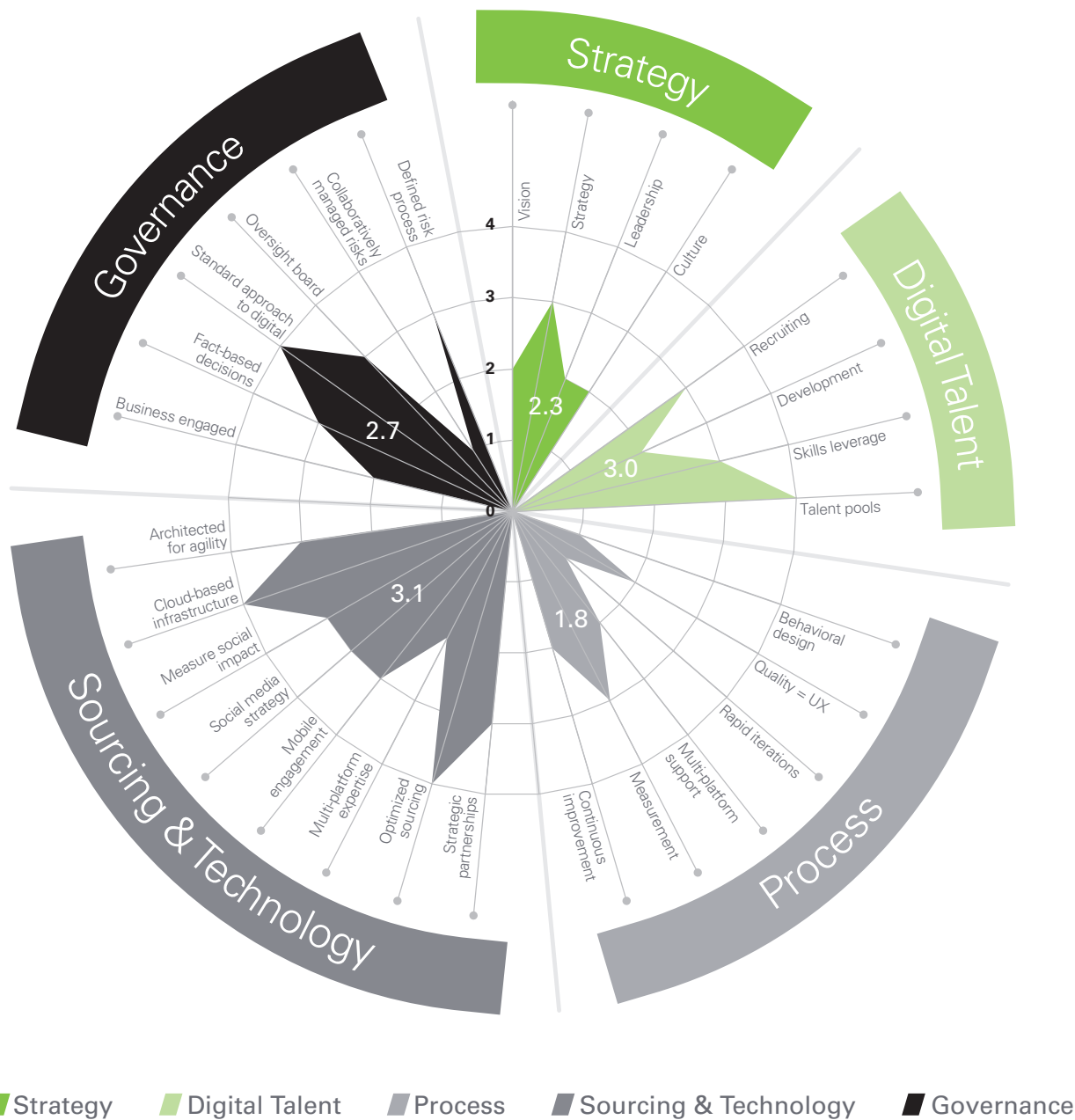
Build the right relationships

In the past, significant innovations in technology came along one at a time and the journey was simple and linear. Today we are in a world where four or five big things have arrived together, with more close behind them. From Cloud and Mobile to Analytics and Social, each of these advances has the potential to produce enormous value in its own right; however, the full potential emerges only when those capabilities work in combination to create new experiences for consumers and colleagues.

While the big leaps forward may be empowered by advances in technology, success depends on a new level of engagement and consensus among stakeholders across the entire organization. The business case for genuinely innovative investment will look different from the 'sustaining investment' that merely keeps the lights on. The stakes are higher and the ROI may be less certain or longer in coming. Although we see great potential for the CIO to perform the role of 'enterprise enabler,' it may be necessary to build new kinds of relationships with experts in the digital landscape. It will require a new operating model and sourcing strategy. IT organizations can no longer afford to go it alone as single source providers of technology solutions. They will build new kinds of relationships ranging from experts in the digital landscape to acquire needed skills, Cloud-based infrastructure, and service based solutions.

For example, the KPMG Digital team that worked on the Trane MAP project (see page 7) is one of the world's leading customer experience agencies: it is also part of a KPMG digital enablement capability that provides full-cycle support to CIOs and their teams. We can help you understand the kind of talent you need to hire and how to structure a team that thinks digitally; we can help frame approaches to product research, design and management, from concept to roll-out; we also provide the wider business advisory expertise that grounds digital strategy in the real world. This re-positions the IT team as the go-to partner for solution delivery and management.

> **"** There are plenty of agencies who can build beautiful apps and there are plenty of folks who want to help you organize your IT, but it feels like mixing the two is oil and water. You need a provider who sees both sides of the coin and we bring both types of capability: that means you get practical, value-adding innovation that supports the big business picture… **"**
>
> **Joel Osman,** Managing Director, KPMG Digital

In conclusion

This white paper has shared seven tips for success in digital innovation and highlighted a role for a new breed of visionary CIO. We know that some of this may seem 'easier said than done,' especially as some companies are more 'digitally ready' than others. However, these tips are grounded in fundamental business principles and intuitive common sense. It is no coincidence either, that the culminating point is about **relationships**: there are plenty of people, inside and outside your organization, who will be interested and inspired to help with the journey of digital innovation.

#1: Focus on your business

#2: Think it through

#3: Embrace your consumers

#4: Learn from examples

#5: Invest in relevant digital skills

#6: Understand your strengths

#7: Build the right relationships

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