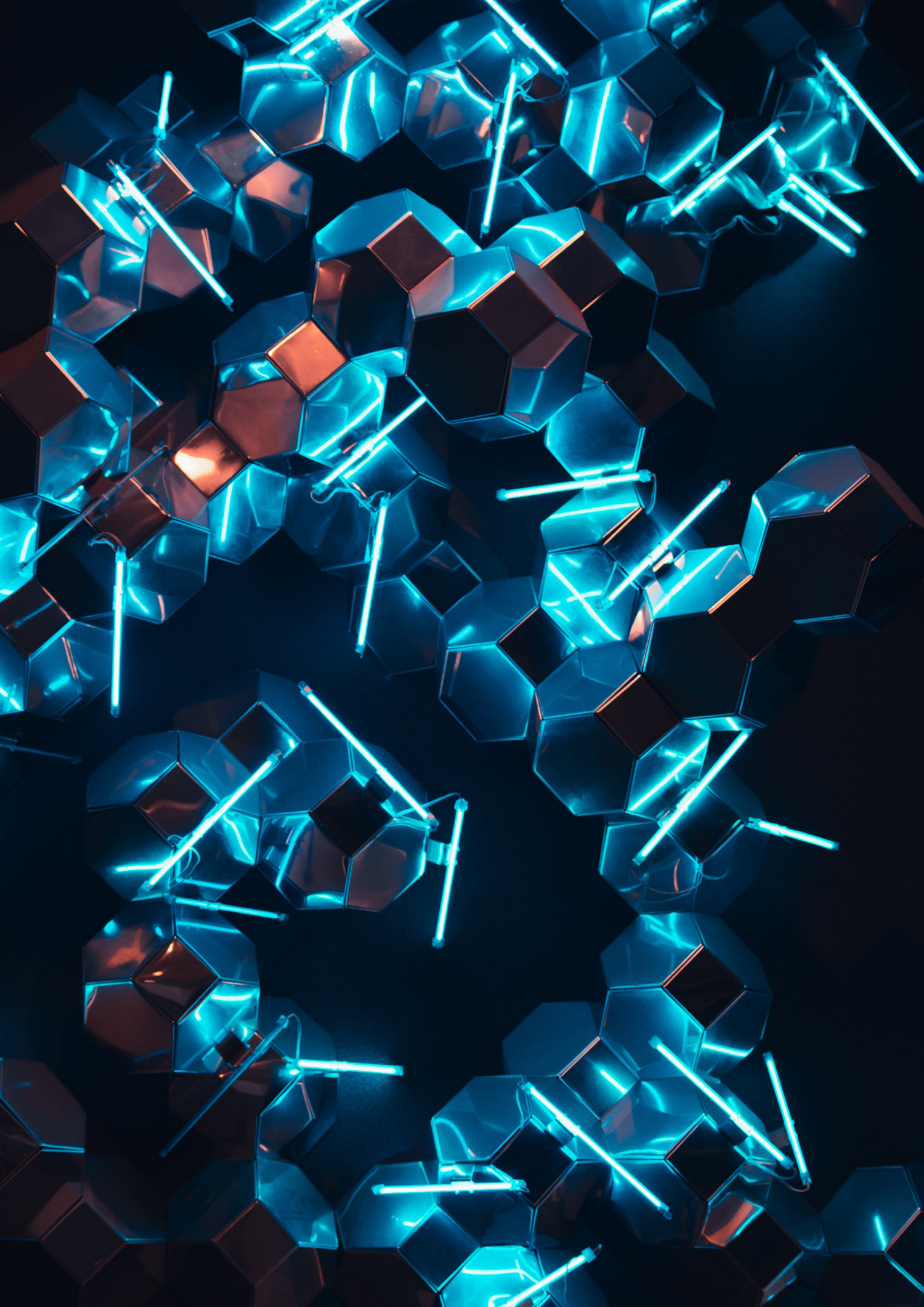


REIMAGINING WORK



BEFORE AND AFTER
COVID-19



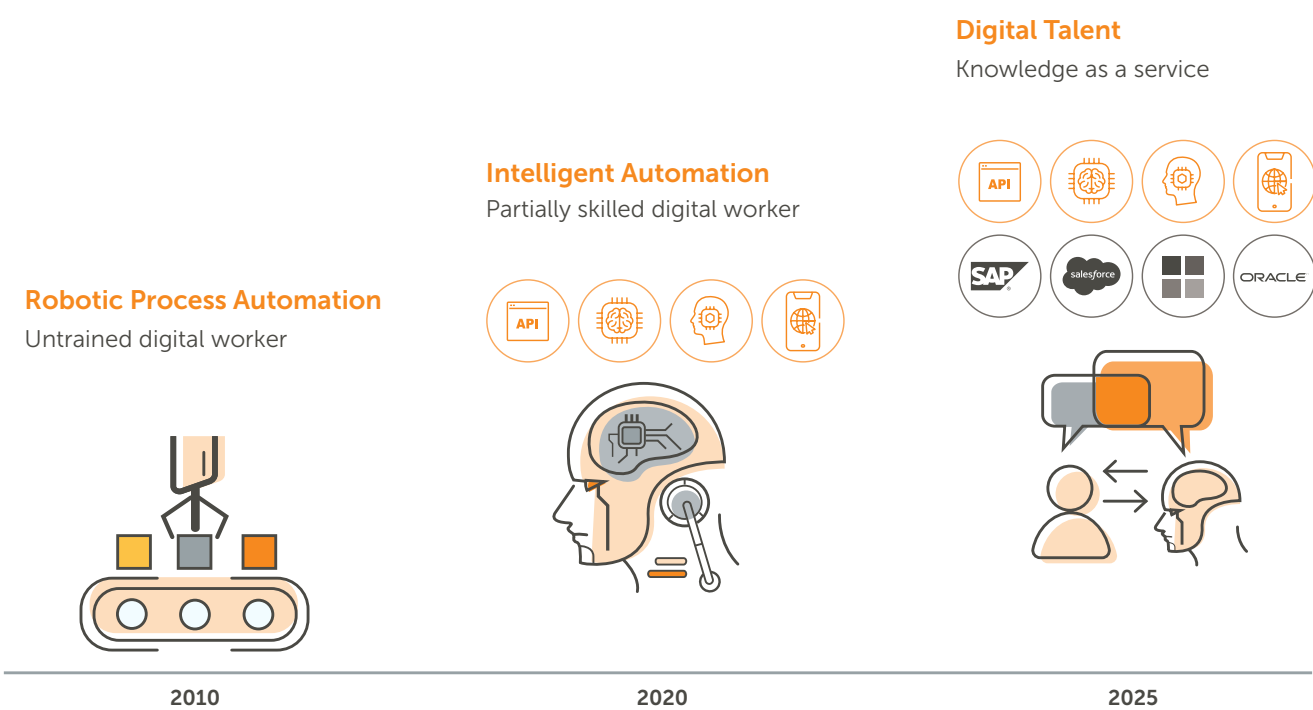
CONTENTS

Future of Work	3
Narrowing our focus	4
20 years of change in just 12 months	5
But what will be the blockers?	7
Key research questions and report structure	8
Placing the big automation bets	9
Workflow transformation	11
Workforce automation	12
Workplace modernisation	13
Navigating the automation spectrum	15
Introducing the automation spectrum	16
Reaching a point of digital singularity	17
What are the roadblocks?	18
Developing a roadmap towards the digital workforce	19
Implications for the C-suite	23
Implications for boards and executive committees	24
Implications for IT leadership	25
About the authors and contributors to the research	29

FUTURE OF WORK

The old way of working has gone forever, and we are entering a new normal. The Bank of England’s chief economist Andy Haldane confirmed as much recently, when he said that the coronavirus pandemic has triggered the largest shift in working practices in modern times. This shift will not be temporary: CIONET’s 2020 Innovation Programme suggests this disruption is likely to persist well beyond the end of the current crisis. To help leading organisations prepare for a post-COVID era, Blue Prism

Figure 1 – Defining intelligent automation



NARROWING OUR FOCUS

There has been a great deal written about the future of work. It is a broad-ranging literature that continues to extend in response to socio-economic and technological change. To narrow our focus on the likely impact of the pandemic on working practices, we have divided our analysis of the future of work into three inter-related areas: workflow, workforce and workplace. This approach helped structure our discussions with 20 C-level executives (COOs, CIOs and CTOs) at blue-chip organisations (see **Figure 2**). We have used these discussions to produce an integrated set of recommendations on how businesses can prepare for the future of work in the post-COVID age.

This report examines the likely changes to workflow, workforce and workplace. It focuses specifically on how intelligent automation might help large organisations to be more productive and responsive in the future. We believe intelligent automation could break a logjam around productivity and corporate growth that has contributed to economic stagnancy for much of the past two decades. We also look at the potential barriers to workplace innovation and how the C-suite will need to address these blockers as a matter of urgency. We conclude by presenting a roadmap for the adoption of intelligent automation and provide executives with a practical framework for following this route.

Figure 2 – List of participating interviewees and their organisations

Affinity Water	Aggregate Industries	Allen & Overy	Astra Zeneca
BT Enterprise	Chicago Mercantile Exchange	Dell	Dunnhumby
FCA	Fiserv	GSK	Hilton Group
Kensington Mortgage	Landsec	M&G Prudential	Ministry of Defence
Salesforce	Swiss Re	Tate & Lyle	

20 YEARS OF CHANGE IN JUST 12 MONTHS

2020 has been a year of fundamental technological and socio-economic transformation. To illustrate the scale of this profound change, let's contrast the pre-COVID environment of 2019 against what we see as the post-COVID new normal (see **Figure 3**).

So what do these fundamental transformations mean for the business and its leaders? Here's what we believe are the change imperatives facing the C-suite across the three core areas of workflow, workforce and workplace:

Figure 3 – COVID19 – 20 years change in 12 months

	Pre-COVID-19	New Normal
 Workflow	Operational Excellence Hierarchal & Siloed Modernising the factory	Customer Centricity Agile mindest for a VUCA world Edge-based business innovations
 Workforce	Localised skills Gig economy RPA based automation	Global talent sourcing Expert generalist Working with digital talents
 Workplace	Office-based Shared hot-desking We-Work	Location independent Frictionless, collaboration spaces Social clustering

Source: CIONET UK research 2020

- Workflow:** Boards will need to shift their focus from operational excellence to customer experience¹. Making this shift is the only way that boards can hope to compete with the rising tide of digital-native businesses that have found new ways to flourish during the pandemic. The shift from operational excellence to customer experience necessitates cutting out large swathes of internal projects that concentrate on modernising the factory. Instead, business leaders should apply their scarce investment resources to enhancing all stages of the customer journey, from product or service acquisition through to lifecycle management. In addition, large incumbents will need to convert their rigid and often hierarchical structures into agile and fluid business models that can respond rapidly to a VUCA (volatile, uncertain, complex and ambiguous) world. In all these respects Intelligent Automation offers opportunities to generate new sources of value as described in Section 2.
- Workforce:** Traditional pools of localised labour will need to be supplemented by global as well as digital talent. The pandemic has demonstrated that staff can work successfully away from the office – and this realisation is likely to mean employees spend much less time in the corporate headquarters in the future. This shift to remote working is likely to sponsor far greater fluidity in the sourcing of professional and managerial staff across North America, Europe and Asia. Commensurate advances in artificial intelligence

(AI) and machine learning (ML), or what we refer to as digital talent, will absorb many of the routine elements of day-to-day work. These advances will mean staff can use their valuable time to instead focus on innovative and creative tasks.

- Workplace:** Organisations will need to reduce their office footprint by between 30% and 50% over time, casting off regimental rows of screen-based workers in favour of creative spaces that encourage team-based working – what we describe in the report as heads-up and heads-together working. Heads-down working will be largely confined to the home or less costly satellite offices. Real estate specialist WeWork has set a pre-COVID example of how the office of the future might look, with an emphasis on social and flexible meeting spaces. We expect blue-chip enterprises to adopt similar office arrangements to encourage staff to spend their time in the office socially and productively.

Across workflow, workforce and workplace, we believe the combination of these concurrent changes will enable organisations to become more agile and relevant in the post-COVID era through the adoption of the following approaches:

- An asset-lite approach to property, infrastructure and human resources – reducing fixed costs and increasing operational flexibility.
- A digital workforce, combining humans and digital talent that will be more innovative by responding creatively to external changes.
- End-to-end workflow automation that will accelerate operational agility and draw trading partners into a close-knit ecosystem.

The result of this transformation in working practices could be a virtuous circle that places innovation at the top of the corporate agenda (see **Figure 4**).

Figure 4 – A new eco-system is emerging



“ Blue Prism chief executive Jason Kingdon says the business of the future will consist of three equal parts: one-third humans, a third digital talent, and a final third of traditional IT. This state of equality could be reached by 2030. ”

¹ CIONET report on Customer Centricity published in 2020

BUT WHAT WILL BE THE BLOCKERS?

Our discussions with digital leaders exposed potential barriers to a transformation in working practices. These blockers, many of which we believe can be overcome by adopting intelligent automation include:

- **Legacy debt** that encompasses outdated systems, processes and infrastructures that are too costly to replace. Intelligent automation can help to integrate legacy and modern systems by removing cumbersome manual interfaces.
- **Fragmented data** that coalesces to create a vast pool of unexploited resource. Intelligent automation can help organisations to clean data and codify knowledge, helping companies to develop deeper insights and tap into new sources of value.

- **Legacy skills and cultures** that resist change. The move to a digital workforce can help boost perceptions of work by removing repetition and creating a focus on creativity. This change should motivate employees, especially the incoming generation of digital-savvy millennial.

The big pay-off from the introduction of intelligent automation could be the development of Knowledge as a Service (KaaS) techniques that help to capture, codify and apply the abundant expertise that is currently locked in the minds of employees. This development could lead to the birth of new technologies and specialists, such as has been the case in Software as a Service (SaaS) and the emergence of major players like Salesforce and Workday.



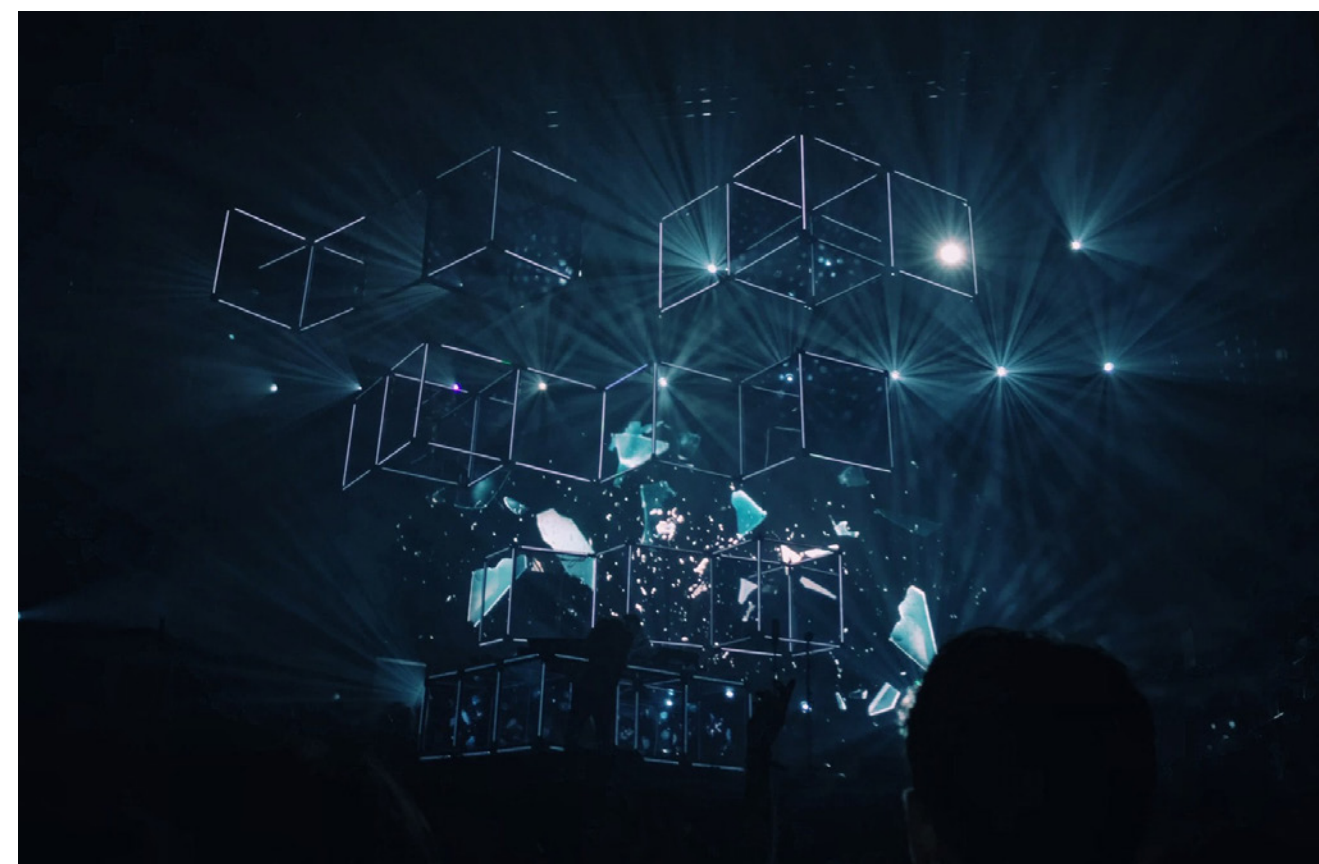
KEY RESEARCH QUESTIONS AND REPORT STRUCTURE

During our discussions with our Innovation Council members, we have sought to identify where COOs, CIOs and CTOs should place their big bets with respect to the introduction of intelligent automation and digital talent in the post COVID era – how, in short, should they plan and prepare for such eventualities? Three sub-questions relating to workflow, workforce and workplace emerge:

- **Workflow:** How should businesses automate knowledge-based work activities, while still placing the customer at the centre of business conversations?
- **Workforce:** What reskilling will be necessary to transition staff into a digital-work environment and how can businesses overcome cultural resistance?
- **Workplace:** Will distributed-working structures persist beyond the COVID crisis and, if they do, how will staff continue to collaborate and socialise effectively?

The main report is structured into sections dealing with expressed needs for further automation; the likely evolution of robotic process automation (RPA) into fully-capable digital talent; overcoming the potential barriers to automation; and a roadmap to guide execution. The conclusion examines the implications for the board and C-suite and suggests practical next steps.

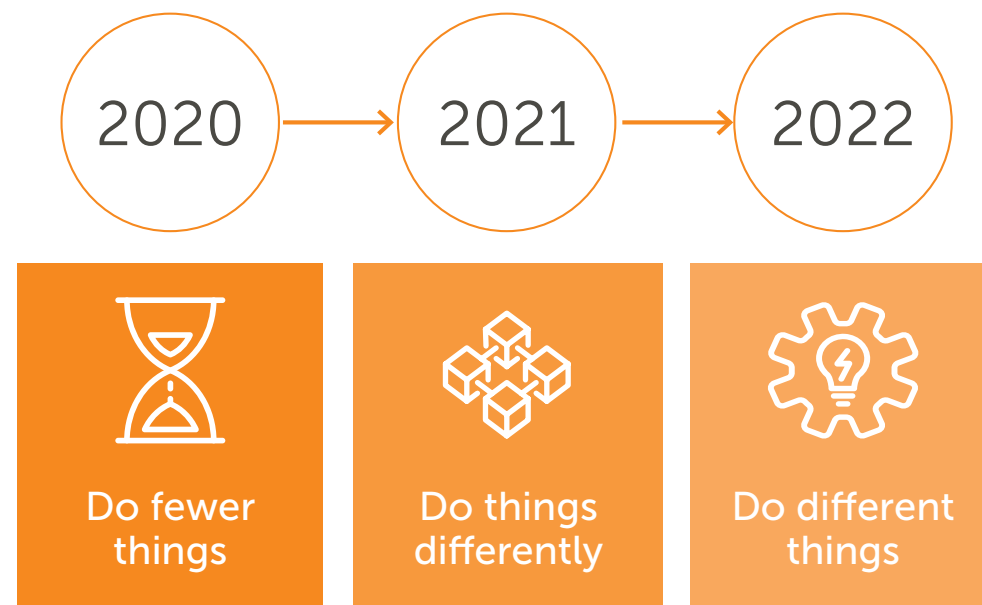
We believe this report will give you and your executive colleagues the insight you need to prepare for post-COVID changes to workflow, workforce, and workplace. This transformation in working practices will present many challenges for executives, yet these barriers are far from intractable. By embracing the benefits of intelligent automation, large organisations will have the foundations to prepare for the future of work with confidence.



PLACING THE BIG AUTOMATION BETS

Our interviews with 20 digital leaders (see **Figure 5**) across a three-month period have allowed us to identify commercial post-COVID opportunities. We believe these openings could generate new and scalable sources of value within large enterprises, solving billion-dollar problems. This section describes these opportunities within the context of workflow, workforce and workplace. We conclude by suggesting that distributed working is here to stay, and that greater emphasis needs to be placed on creating agile, knowledge-based organisations that focus on enhancing the customer experience.

Figure 5 – Three steps approach to current crisis

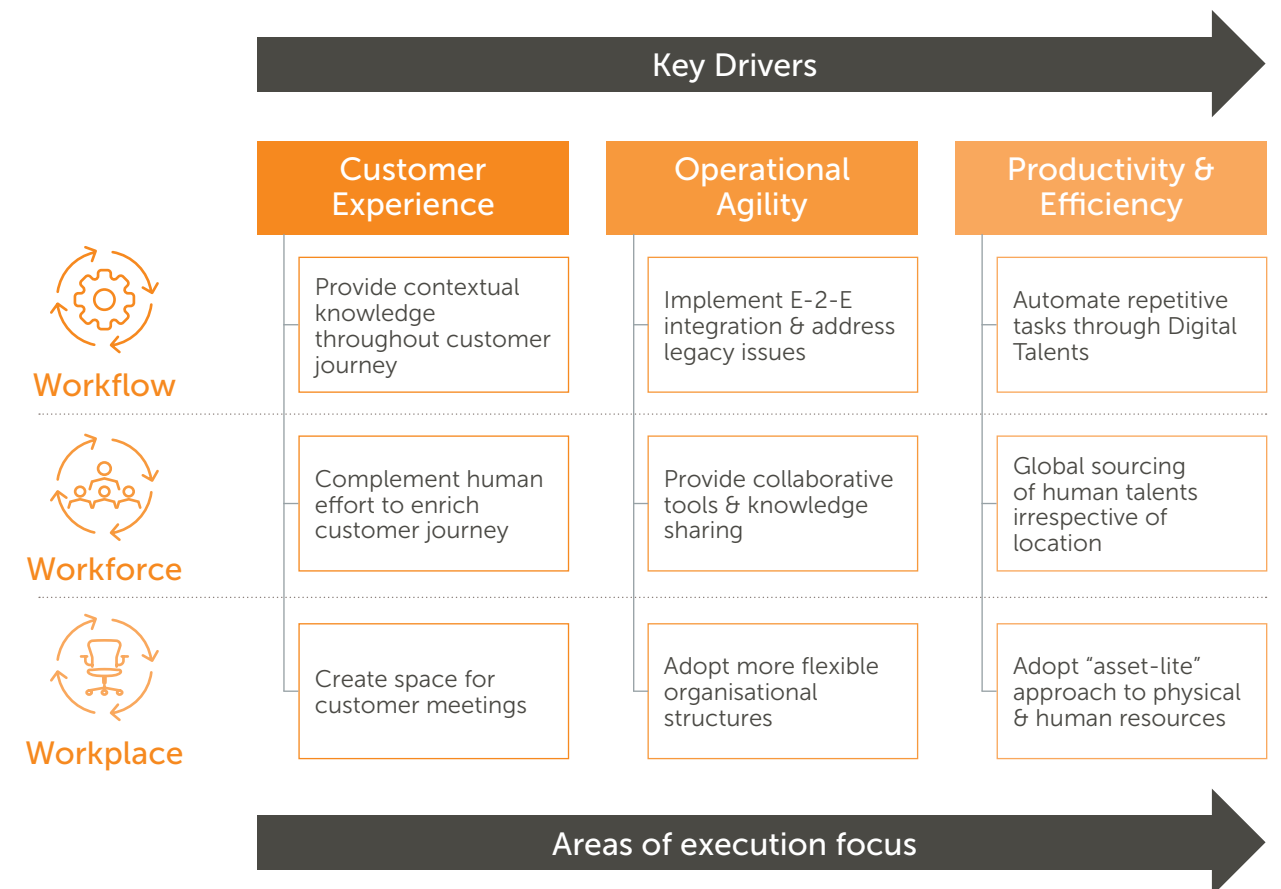


There are three key drivers for change that were mentioned consistently across our interviews with digital leaders:

1. **Personalising the customer journey** across the entire lifecycle, from value-exchange (time of purchase) to value-in-use (enriching the user experience).
2. **Achieving organisational agility** to cope with an increasingly volatile, uncertain, complex and ambiguous world (VUCA).
3. **Increasing productivity and efficiency** by supplementing the human workforce with intelligent automation and digital talent.

But what does this permanent shift in the way we work mean for business? The following opportunities were identified during our interviews and reinforce the prospect of scalable breakthroughs in the post-COVID age. Figure 6 summarises the key drivers that are encouraging organisations to innovate across workflow, workforce and workplace, with particular emphasis on intelligent automation and digital talent.

Figure 6 – matching key drivers to workflow, workforce and workplace opportunities



WORKFLOW TRANSFORMATION

The areas of workflow that involve the transfer of structured information, such as supply-chain and back-office data, have already been automated to a large degree. There are areas of stubborn resistance: legacy applications, for example, continue to pose obstacles to successful workflow transformation. However, the extensive use of application programming interfaces (APIs) has helped digital leaders to create closer integration between closed systems. Yet there is an opportunity to do more. In particular, we believe there is scope to improve end-to-end processes by using robotic process automation (RPA) to eliminate manual interfaces.

Unstructured data is another area of resistance. Organisations are having more difficulty automating processes associated to the use of unstructured information, such as legal documents, engineering reports and client files. The good news is that we believe advances in AI and ML could be a turning point, especially in professional services industries, such as engineering, law and medicine. This automation could have a measurable positive impact on professional productivity.

The introduction of social-distancing measures meant boardroom attention turned decisively toward processes through 2020 that influenced the customer journey, including online and contact-centre interactions, as well as customer servicing and software upgrades. The focus on customer experience will continue post-pandemic. Bots are already being deployed in contact centres to enhance staff productivity and encourage cross-selling. It has also become more important for traditional firms to modernise their systems of customer engagement as digital-native start-ups have expanded into areas like travel and healthcare.

Expect similar developments through 2021 and beyond: the focus on all aspects of the customer journey will be the new normal.

Examples of workflow improvements

1. Customer experience

- For a leading mortgage company, intelligent automation is helping to compress loan approval times and to optimise profitability across the customer lifecycle.
- For a global law practice, the ability to codify, access and share historic case materials is accelerating both deal completions and dispute resolutions at lower fees.
- For a global IT supplier, intelligence embedded across the entire supply chain is increasing the velocity of product fulfilment in line with changing customer demands.

2. Operational agility

- For a building materials supplier, the ability to predict and respond to last minute changes in customer requirements is improving margins dramatically.
- For a global pharmaceutical manufacturer, automation of clinical trials is compressing time to market for new vaccines from years to months.
- For a worldwide hotel group, modernisation of reservations systems is providing an effective defence against digital natives entering their marketplace.

3. Productivity and efficiency

- For a food ingredients manufacturer, connected knowledge across different national territories is helping to optimise trade margins and could produce billion-dollar returns.
- For a global pharmaceutical company, the ability to automate many of the common and repetitive tasks is giving time back to professional workers.
- For a financial services organisation, the combination of humans and bots is improving contact centre efficiency by reducing call times.

Our take: Intelligent automation will have the greatest impact on the codification of unstructured information in coming years. This automation should have a transformational effect on knowledge-based organisations.

WORKFORCE AUTOMATION

As many as four out of five employees have switched to home-based working in the past nine months. We expect many employees to continue to home-work part or full-time in the post-COVID era. These distributed working practices could have beneficial effects for businesses in terms of where their talent is sourced (globally) and how it is deployed (home and/or office). However, distributed working will also create a significant challenge when it comes to replicating the face-to-face interactions of traditional workplaces. Digital leaders will need to search for powerful collaborative tools and knowledge-sharing facilities to ensure a level playing field for all employees, regardless of their location.

Staff training and development will be another key challenge in a distributed work environment. Digital leaders recognise the shortfalls in current online-learning methods. Once again, collaboration will be the watchword. The sharing of collective experiences will continue to be an essential component of training and development, including interchanges between junior and senior staff.

Organisations will continue to find ways to use robots to displace human effort, especially in the completion of routine and repetitive tasks. However, this replacement will not be an instant revolution. The constant state of flux in the nature of knowledge work will mean that there is a hybrid relationship between human and digital workers for many years to come. In the longer term, however, intelligent automation could help to remove layers of middle management. This use of automation could speed up decision-making processes. Remote-sensing technology, meanwhile, could help reduce engineering effort in asset-heavy sectors such as utilities and energy.

Examples of workforce opportunities

1. Customer experience

- For a mortgage provider, the combination of human and digital workers is helping to enrich the customer experience over the lifetime of a loan.
- For a global travel company, automation is helping to shift human focus away from transaction-handling and toward providing travel advice.
- For a defence organisation, the concept of a "digital foundry" could encourage closer human collaboration between trading partners in complex ecosystems.

2. Operational agility

- For a global law firm, the increasing reliance on distributed working requires a "level playing field" between office- and home-based employees.
- For a global software company, interaction between humans and machines will become mission-critical in the era of sensors and 5G.
- For a water utility, crowdsourcing software will help speed-up application development and testing processes.

3. Productivity and efficiency

- For a defence specialist, digital education is a strategic priority to help address current knowledge gaps.
- For a global healthcare company, data-science skills and associated digital assets could help revolutionise patient treatments and outcomes.
- For a global hotel company, automation could remove whole layers of management and enable faster decision-making.

Our take: Intelligent automation will need to ensure that distributed workforces remain effective by sharing knowledge and sourcing appropriate talent, both human and digital.

WORKPLACE MODERNISATION

The lockdown due to the coronavirus pandemic necessitated a rapid switch to home working, yet the smooth transition has also had a beneficial and lasting effect on the perceptions of flexible working. This positive change is likely to extend well into the post-COVID era. Experts believe many businesses and their staff will adopt hybrid ways of working, with between 40% and 60% of time spent in offices and the rest at remote locations, such as the home. In the UK, there could be a shift also away from large offices in city-centres to accessible satellite locations in suburban areas, such as commuter settlements around the M25 motorway in Greater London.

These changes will have a huge impact on office design. Offices of the future will need to be flexible and adaptive, perhaps following the pattern already trail blazed by real-estate company WeWork. The main function of the office of the future will be to accommodate 'heads-up' client meetings and 'heads-together' creative and ideation activities. 'Heads-down' work, such as analysis, reporting and management, is likely to remain home-based.

The switch to hybrid working practices is likely to lead to key benefits: for businesses, a reduction in costly fixed assets, such as city-centre offices; for employees, a better work-life balance for all knowledge workers. By also sourcing digitally connected talent from around the globe, businesses could reduce their organisational footprint and floor space, leading to asset-lite corporate structures that are more agile and adaptable for the fast-changing modern world. Many digital natives are already in such an advantageous position and incumbents will need to explore this posture, too.

Examples of workplace modernisation

1. Customer experience

- For a property company, office design, construction and operation will become a process of co-creation with its major clients.
- For a telecommunications operator, virtual meetings with customers will reduce the need for city-centre office space.
- For a data-sciences company, intelligent automation will help generate deeper insights into retail customer behaviour.

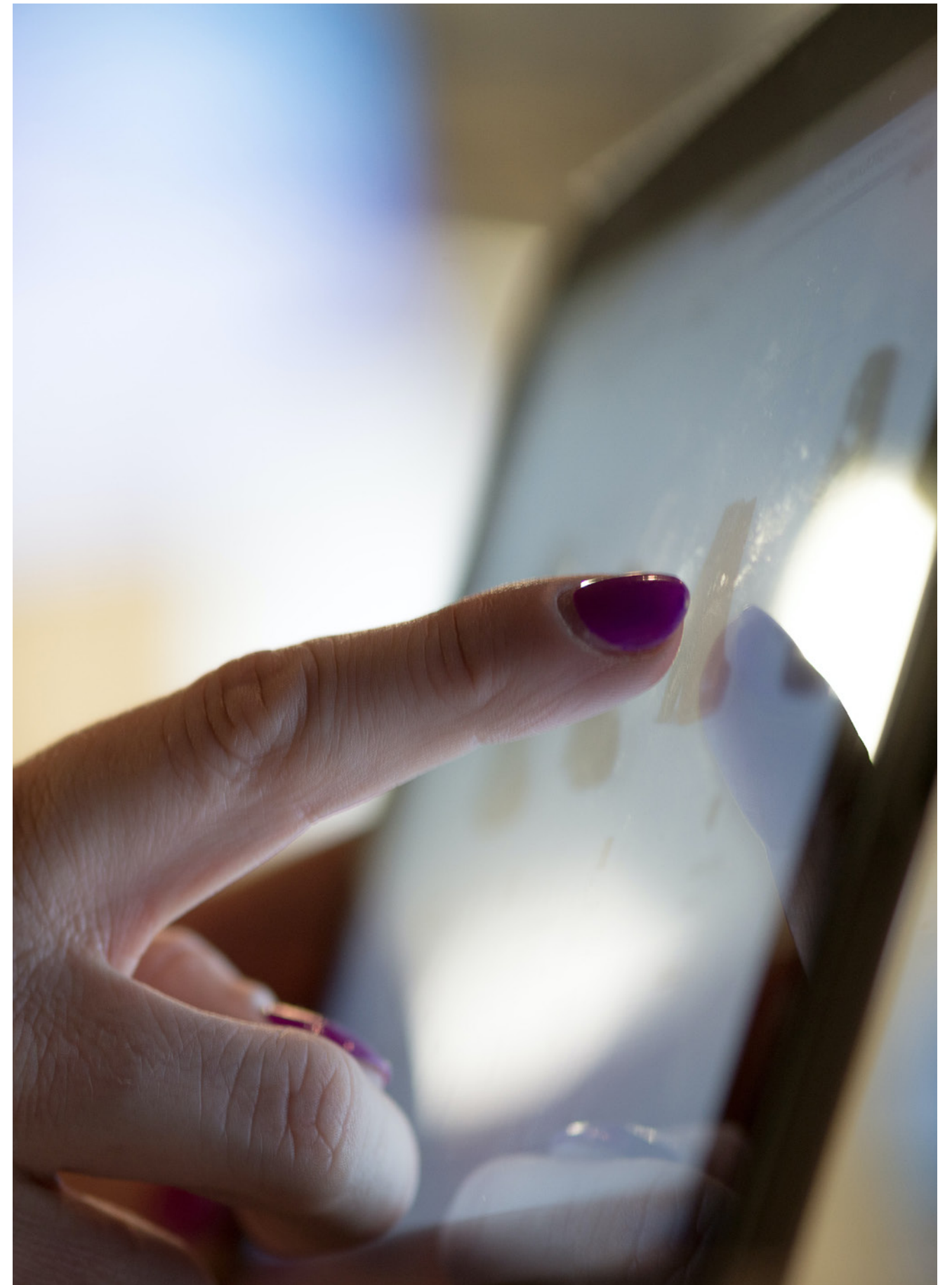
2. Operational agility

- For a construction company, operational sites such as quarries could become entirely automated with no human presence.
- For a pharmaceutical supplier, distributed working will influence the choice of where staff are located across the globe, as well as improving work/life balance.
- For a fund management group, intelligent automation will provide comprehensive market analysis to a distributed workforce.

3. Productivity and efficiency

- For a global IT company, outcomes rather than time at work will become the key performance measures.
- For a global law firm, frictionless office access and flexible space allocation will boost both the quality of the work environment and employee satisfaction.

Our take: Intelligent automation will help create a level playing field between different work environments, giving employees more choice and flexibility in where, when and how they work. In all cases, it will be an essential ingredient in enabling organisations to optimise distributed working over the coming decade.



NAVIGATING THE AUTOMATION SPECTRUM

Digital leaders referred to a broad suite of new technologies that could help reimagine the way we work in the post-COVID age. These technologies include:

- Robotic Process Automation (RPA) platforms, including those provided by Blue Prism, can help integrate work processes across large and complex organisations such as the NHS and police force. RPA also helps start-ups to scale-up their operations.
- Open APIs are helping large organisations, including banks and insurance companies, to create seamless integration between core systems and new applications in key areas such as mobile payments. DevOps is also helping to build bridges between legacy systems and modern services.
- The Internet of Things (IoT) combined with 5G mobile is improving remote maintenance of large-scale engineering assets, such as refineries and pipelines. Sensors have also been applied to road surfaces to detect early stages of deterioration, helping to reduce lifecycle repair costs.
- ML-powered neural networks can now support health practices across the full patient lifecycle by scheduling appointments, undertaking diagnostic analysis and monitoring patient recovery, which reduces the workload on professional staff.



INTRODUCING THE AUTOMATION SPECTRUM

Across the three core areas of workflow, workforce and workplace that we believe define the future of work, we see a continuous spectrum of technological developments. These automations start with RPA, which is already well established, and continue through to a new era of digital talent (see **Figure 7**).

Figure 7 – Spectrum of automation developments



As we move from each step in this spectrum to the next, we see a progressive migration toward technologies that are self-learning and able to complement human activity at every level of an organisation.



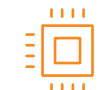
RPA (unattended)

In its early development, RPA software generated action lists by watching humans perform repetitive tasks. This learnt behaviour allowed the technology to start performing tasks automatically, with consequential improvements in speed, accuracy and information security. Early-stage RPA tasks were repetitious, rules-driven and scheduled. Applications have included data migration, status reporting and project documentation.



RPA (attended)

The introduction of AI and ML has allowed RPA to progress, performing complex tasks that are less well-structured and that can be completed in conjunction with humans. These extended capabilities are well-suited to service organisations, where external factors such as changes in regulation can require incremental adjustments to repetitive tasks. This data-led software can act as an effective prompt to contact-centre operatives during customer chat. Other applications include fraud detection, data cleansing and setting up user authorisations.



Intelligent automation

In addition to improvements due to advances in AI, RPA software can also handle a multitude of inputs, from natural-language speech recognition to machine vision. These inputs combined with advances in AI can sponsor pioneering capability, such as learning, reasoning and sentiment analysis. This capability makes it possible for machines to automate end-to-end processes, such as opening a new bank account or approving mortgage loans. Intelligent automation is having a profound impact on every aspect of technology deployment, from the provision of support services to the re-platforming of legacy systems, as demonstrated by Blue Prism's recently launched SAP accelerator.



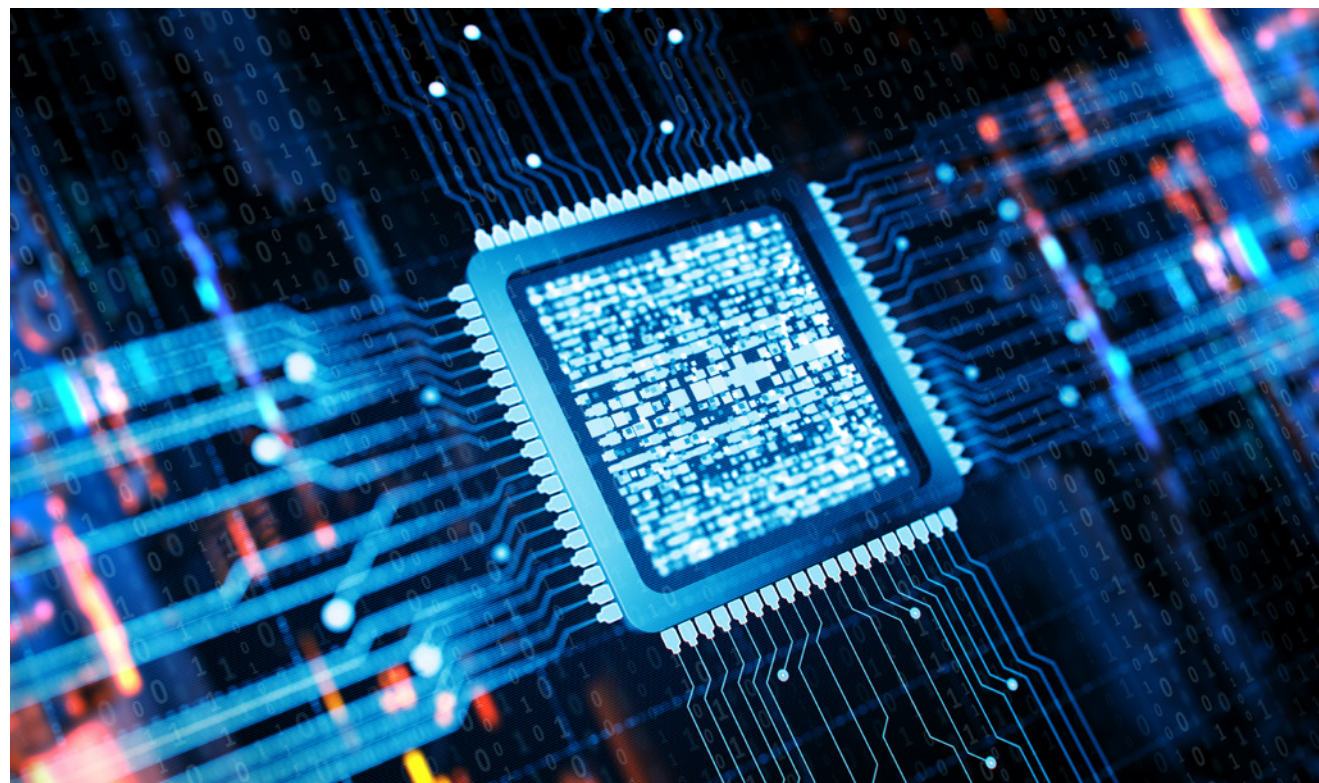
Digital talent

The final stage in the evolution of robotic software will deliver near-human capabilities, including problem solving, judgement-based decision making and customer engagement. This stage will be based on advances in the codification of knowledge-based tasks. It's a stage of development that will lead to the automation of more complex end-to-end processes, such as the management and maintenance of ERP applications. The technology could also take responsibility for office assistant duties and could help run project management offices.

REACHING A POINT OF DIGITAL SINGULARITY

We believe that the end result of the above developments will be a hybrid workforce that consists of humans and digital talent working side by side to increase organisational agility and boost productivity. However, we also believe that there are even greater benefits on the horizon as we approach the point of digital singularity – the point where human experience and technological omnipresence come together. These benefits include:

- Robotic software will enable all digital applications and systems (legacy and modern) to interwork in a seamless fashion. This will usher in a new phase of hyper-accelerated digital transformation, which will be comparable in scale to the advances prompted by the invention of the internet.
- Empowering machines of all kinds to interwork together and interface seamlessly with humans. This progression is already visible in the case of autonomous vehicles and is likely to encompass every mechanical aspect of smart homes and smart cities. This phase of empowerment will lead to a lights-out era in many workplaces.
- Knowledge as a Services (KaaS) will become a burgeoning new industry in the same way that Software as a Service has developed over the past two decades. We will see new players in every area of professional life, from law and medicine to accounting and consulting. KaaS could also transform the education system by tailoring content to an individual's needs during their career. These educational developments could help support the emergence of the expert generalist, which is someone who has the ability and curiosity to master and collect expertise in many different disciplines.



WHAT ARE THE ROADBLOCKS?

The final aimed-for destination might be digital singularity, but the journey will be far from straightforward. Many of our interviewees referred to cultural and structural barriers ahead of technical ones. However, it is also important to recognise that these technical obstacles are not inconsiderable. Our research suggests that there are several key barriers within the workflow domain, including:

- The cleansing and standardisation of corporate data assets to extract full value, especially as they relate to the customer journey.
- The integration of legacy applications within complex, end-to-end processes that span an entire organisation, such as order to cash.
- The harvesting of corporate knowledge that remains embedded in human brains rather than machines.

Staffs at all levels are concerned about the potential for job substitution, especially relating to the increased use of digital talent. As robots begin to enter the workplace, further analysis will be required to understand how work is performed across knowledge and services sectors. Many surveys point to mass job losses. However, evidence from the manufacturing sector so far suggests that many new types of job will be created to support the introduction of robots, such as design-thinking and data-science roles.

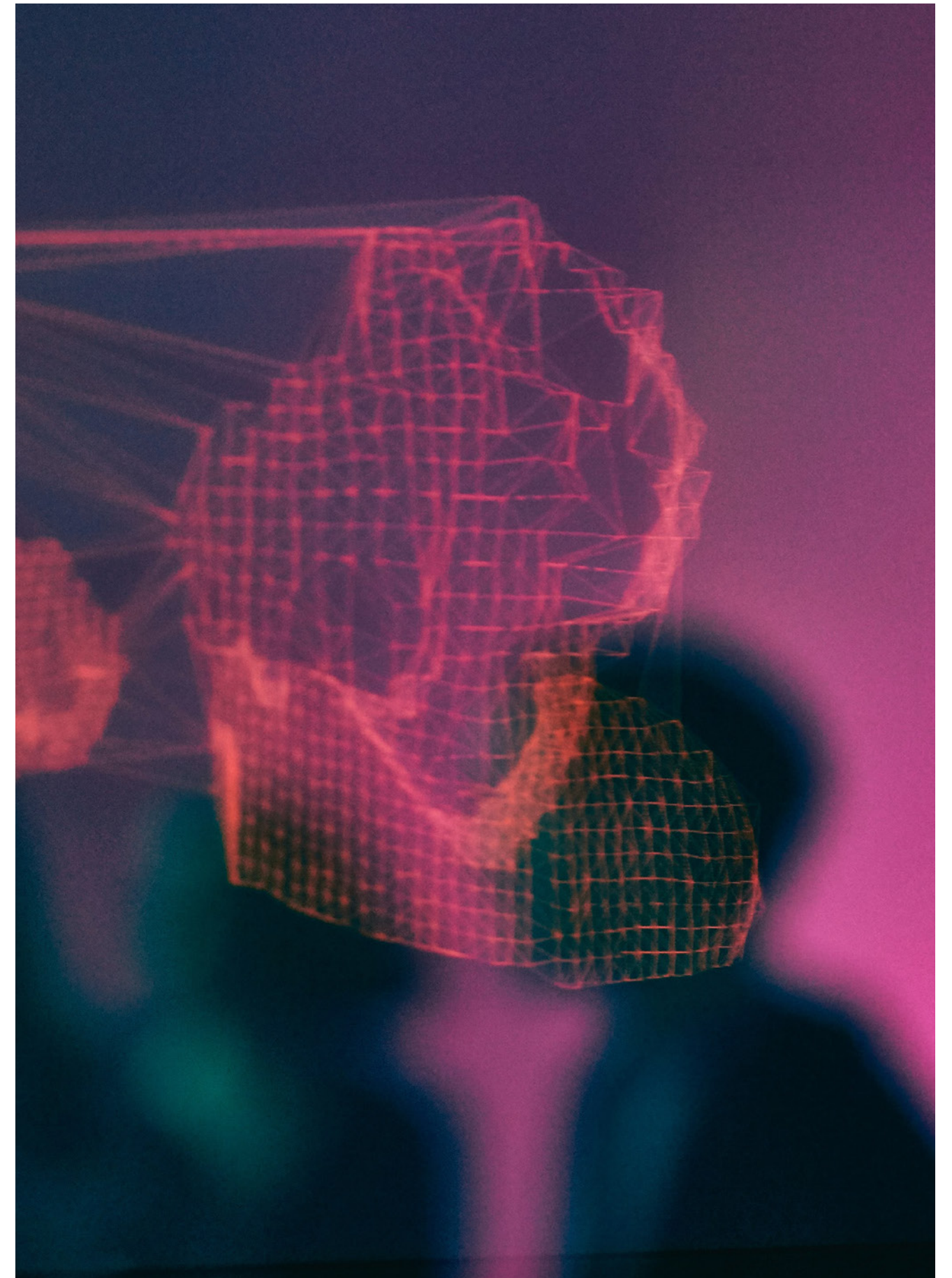
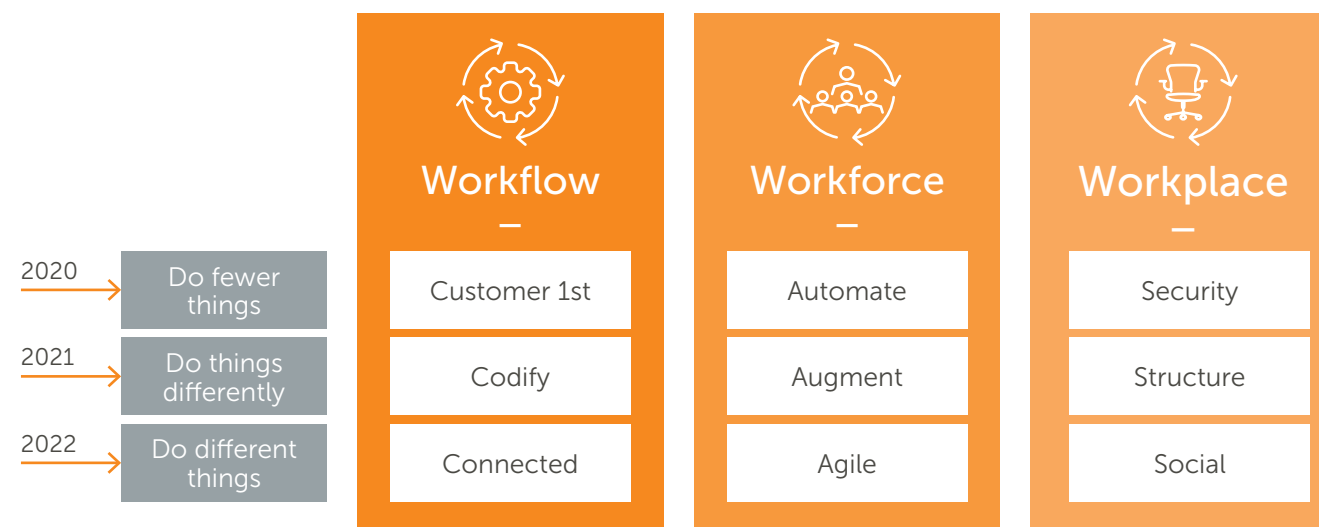


DEVELOPING A ROADMAP TOWARDS THE DIGITAL WORKFORCE

COVID-19 has provided a once-in-a-lifetime opportunity to rethink how we do business. We believe this process of rethinking should focus on how we organise work according to our three core dimensions: workflow, workforce and workplace. In our earlier report on Customer Centricity (see Reference 1), we identified a three-stage approach to coping with the effects of the pandemic:

- **Stage One (in 2020):** Do fewer things. Reducing internal projects and focusing exclusively on the customer journey. For example, harvesting the explosion of online data, personalising customer interactions and strengthening direct channels.
 - **Stage Two (2021):** Do things differently. Adopting more flexible and agile ways of working that respond to the rapid changes in external conditions. The latter could include changes in customer demand, global trade and regulation.
 - **Stage Three (beyond 2021):** Do different things. Re-envisioning the business around the customer experience by exploiting new technologies and business models. Examples include the extensive use of IoT, 5G, AI and wearables.
- By applying these three stages to our three core areas of workflow, workforce and workplace, we see a succession of key initiatives that provide the basis for a one-to-three-year roadmap (see **Figure 8**).

Figure 8 – A roadmap to apply intelligent automation



For digital leaders and their C-suite peers, the practical implications of adopting such a roadmap across our three core areas will be as follows:

Workflow

1. **Do fewer things:** Prioritise, don't optimise. In the next six to 12 months, all workflow enhancements should put customers at the core of the business and reinforce the importance of their journeys. The desired outcome here is to improve, personalise and enhance customers' experiences. Intelligent automation can help to enrich and increase the speed of customer interactions, while also boosting the relevance of business responses to client enquiries.
2. **Do things differently:** Organisations should focus on the end-to-end automation of critical workflows to create a connected company that operates seamlessly across functional silos. This integration will help to improve agility and flexibility. Intelligent automation can also help to integrate separate applications that are embedded within complex processes.
3. **Do different things:** Examine workflows to identify areas in which knowledge can be mapped and codified to provide new revenue sources, such as KaaS. Digital talent can help capture and codify knowledge from individual workers, providing a universal knowledge base across an organisation and out to its external parties.

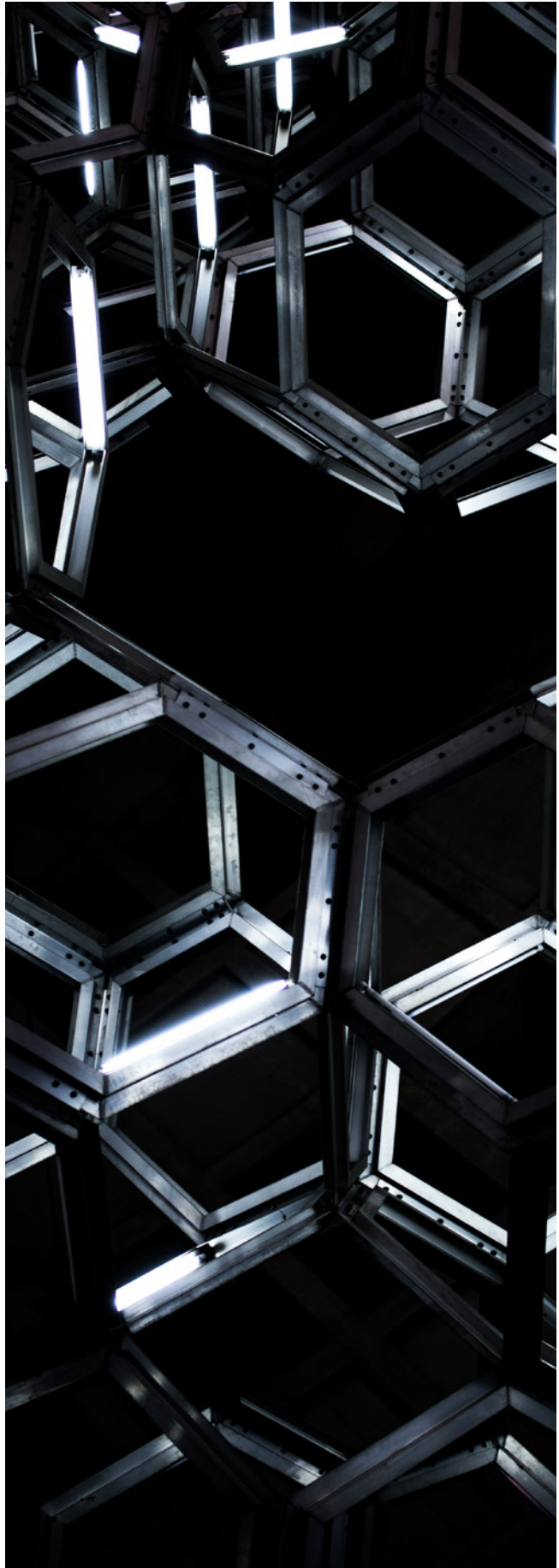
Workforce

1. **Do fewer things:** There is still much potential to automate repetitive tasks and to improve interfaces between humans and machines. The recent traffic congestion across contact centres and web-based channels illustrates the shortcomings of existing systems. Intelligent automation can help relieve humans of many mundane but necessary tasks, leaving them to concentrate on higher value activities.
2. **Do things differently:** Augmentation of more complex professional tasks will become a practical possibility with advances in AI and ML. Managers and professional workers will depend on robots to support decision-making processes. Entire layers of middle management may begin to disappear.
3. **Do different things:** The nature of work itself will need to be redefined as digital assets begin to enter the workplace in large numbers. Blue Prism's vision of equality between human and digital talent could help to transform the structures of current organisations to make them more agile and responsive to emerging competition.

Workspace

1. **Do fewer things:** Security has become a key issue during this year's rapid transition to a distributed work environment. Employees are mixing devices and applications for work and pleasure. Nefarious cyber activity has looked to exploit this overlap and has increased during the pandemic. Intelligent automation can help strengthen information security and improve identification and authentication processes.
2. **Do things differently:** Enterprises have invested in asset-heavy infrastructures, such as centre-city offices. There was little encouragement to work from home previously, but this sentiment has changed dramatically since March 2020. The move to remote working is encouraging executives to consider an asset-lite approach to physical building that takes advantage of other work locations, such as coffee shops and flexible spaces, such as the model pursued by WeWork. The introduction of digital talent will also help to further reduce the need for fixed office space.
3. **Do different things:** Hybrid working (home and office) is likely to reduce overall social interaction. There is also likely to be a big reduction in town-hall meetings and large-scale physical events. However, staff will continue to value the social aspects of work, so executives should turn their attention to workspaces that are designed to foster creativity and collaboration and support social interactions and clusters.

“ COVID-19 has provided a once-in-a-lifetime opportunity to rethink how we do business. ”



IMPLICATIONS FOR THE C-SUITE



Executives have focused on business continuity during the move to distributed working through 2020. As we move into the post COVID-era in 2021, priorities will shift away from operational excellence, or modernising the factory, and toward improving the customer journey, especially where companies feel threatened by digital-native start-ups. The emphasis on e-commerce and online customer interactions during the pandemic has re-emphasised the need to accelerate digital transformation throughout medium and large organisations.

IMPLICATIONS FOR BOARDS AND EXECUTIVE COMMITTEES

To make a successful transition to a fully-fledged digital business, boards will need to address legacy cultures, processes and skills. Feedback from our interviewees suggests that cultures and skills will be the primary challenges compared to technical issues. In this respect, preparing for a digital workforce will require a great deal of planning and communication. A summary of board priorities and concerns includes:

Strategy formulation for a post COVID-era

- COVID-19 has been an effective catalyst to accelerate digital transformation, including the growing dominance of digital natives during the pandemic.
- Bringing the voice of the customer into every boardroom conversation will be essential to overcome cultural barriers and to embrace new business practices.
- Cash pressures will favour investment in automation. However, management will need to be clear about outcome measures to evaluate the impact of change programmes.

Technology-driven change in the post-COVID era

- A myriad of new technologies, such as intelligent automation and digital talent, are set to transform the business landscape in the coming decade.
- Most boards now understand the central role of technology but need to appoint non-executive directors with deep digital skills to help shape strategy
- Technology is seen as an enabler for change but is not seen as an end in itself. Tackling legacy debt will be a top priority for boards in the next few years during the move to digital business.

IMPLICATIONS FOR IT LEADERSHIP

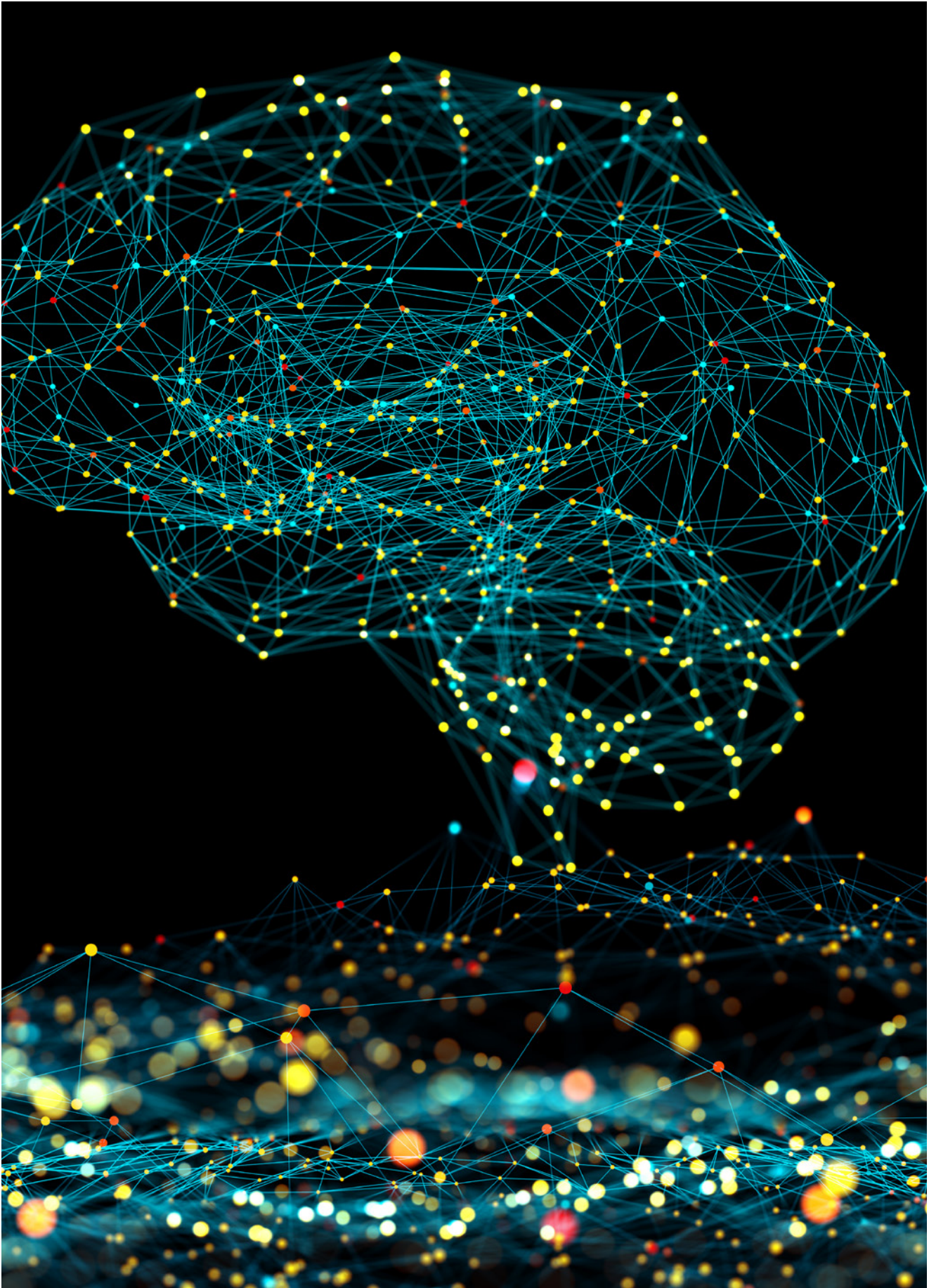
The message for IT leaders is clear: become business advisers and partners rather than technical operators. The day-to-day choice of IT systems and vendors is rapidly devolving to functions and lines of business. IT leaders need to focus on business opportunities that are technology-enabled, as well as strengthening enterprise architectures to improve governance and consistency.

The CIO should be a genuine business partner, acting as a consultant to the lines of business. This will require a practical grasp of new-wave technologies, such as intelligent automation, and a sensitivity to the weak signals emerging over the technology horizon. However, CIOs should also devote time to automating IT services so that they and their teams can concentrate on business priorities. It is here that we believe intelligent automation and digital talent present an opportunity to transform the speed and quality of IT services (see **Figure 9**).

Figure 9 – Opportunities to automate IT services

Data Migration	Data Validation	Process Discovery	PMO Function	Testing	Transaction Execution
Data migration or orchestration to the new database tables	Validation of the conversion and loading data	Process discovery and import into Solution Manager or other customer's documentation repository	Status reporting (Calculations and alerts) and project documentation	System/smoke/ security testing when systems are setup. Auto-create and auto-route tickets for Issue Management.	Complex transactions (configuration like pricing and workflow)

In conclusion, success in the post COVID-era will be linked directly to a closer collaboration between business and IT leaders, with both sharing common objectives. The pandemic has shown up deficiencies in incumbent structures and processes when compared to digital natives. This gap must be closed if incumbents are to survive and flourish in the post-COVID era. The move to a digital workforce should become a top priority at board level if incumbent organisations are to achieve the agility and speed of their digital competitors.



The background of the slide features an abstract composition of translucent, faceted geometric shapes, primarily pyramids and prisms, in various shades of blue and cyan. These shapes are arranged in a layered, overlapping manner, creating a sense of depth and complexity. The lighting is dramatic, with strong highlights and deep shadows, emphasizing the sharp edges and facets of the crystals. The overall aesthetic is modern and technological.

“ As organisations grow they become more complex and leaders become separated from front-line workers and customers. Communication breaks down and the silos work in disconnected ways. Intelligent Automation helps to ensure organisations know what they know, codifying the processes of customer engagement and decision-making such that routine tasks happen automatically and the data and insight needed for humans to collaborate is routinely available and deployable. ”

ABOUT THE AUTHORS AND CONTRIBUTORS TO THE RESEARCH



Roger Camrass
Lead researcher

A pioneer of today's Internet as an ARPA research fellow at MIT in the seventies, Roger has spent over forty five years helping corporations harness the power of new technologies such as cloud, mobile communications, e-commerce, voice recognition and satellite. He was a partner at EY responsible for e-commerce during the dot.com boom. He is a graduate of Cambridge University and MIT, and a visiting professor at the University of Surrey.

See www.rogercamrass.com



Jenniffer Gearheart-Tang
Researcher

Jenniffer has over 25 years of international corporate experience specializing in innovation, business strategy, marketing & senior executive recruitment at Shell International & Korn/Ferry International. She was Head of Innovation at Shell where she developed an award winning global digital platform – Shell ideas360, which transformed corporate innovation.

See www.i-nnov8.com.



Trevor Didcock
Contributor

Trevor hung up his boots on his CIO career in 2015 after leading the technology functions at easyJet, The AA, The RAC and HomeServe since 1999 through periods of substantial growth and transformation. He now chairs Futurice Ltd, the digital engineering and innovation firm, is the Senior Independent Director at Affinity Water and a non-exec on the CAA's Programme Delivery Board. He provides advisory and mentoring services through his business Integrum Consulting and is an early stage investor in nine tech startups.

See www.linkedin.com/in/trevordidcock/



Chieng Moua
Global Vice President
of Innovation

Chieng Moua is vice president of innovation at Blue Prism, developing strategies and concepts for innovative digital solutions through delivery of prototypes to gain an understanding of how technologies will solve looming or current business challenges and opportunities for clients. He brings more than 20 years of experience as an Executive Information & Automation Advisor and Enterprise Architect to the role. Chieng is highly experienced in a broad range of implementation methodologies and business process management practices, and has a strong track record of managing both large and small projects on time and on budget to completion.

See www.linkedin.com/in/chieng



About CIONET

CIONET is the leading community of IT executives in Europe and LATAM. With a membership of over 7000 CIOs, CTOs and IT Directors, CIONET has the mission to help IT executives achieve their aspirations. CIONET opens up a universe of new opportunities in IT management by developing, managing and moderating an integrated array of both offline and online tools and services designed to provide real support for IT executives, so they can do more than just keep up with change but ultimately define it.

www.cionet.com



About Blue Prism

Blue Prism is the global leader in intelligent automation for the enterprise, transforming the way work is done. At Blue Prism, we have users in over 170 countries in more than 2,000 businesses, including Fortune 500 and public sector organizations, that are creating value with new ways of working, unlocking efficiencies, and returning millions of hours of work back into their businesses. Our digital workforce is smart, secure, scalable and accessible to all; freeing up humans to reimagine work. Blue Prism's vision is to provide a digital workforce for every enterprise. To learn more visit

www.blueprism.com and follow us on Twitter @blue_prism and on LinkedIn.

