

# The Future of Work

“Paradoxically, the more we are able to communicate anytime and anywhere, and the less distance matters, the more important it becomes where you are, who you choose to speak with and in what context you choose to do so.”

Carsten Sørensen, report co-author.



CORPORATE RESEARCH FORUM

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**The Future of Work**

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Carsten Sørensen and Gillian Pillans

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Vincent Belliveau

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Cornerstone OnDemand  
31-35 Kirby Street  
London, EC1N 8TE  
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## Foreword

Cornerstone is delighted to contribute to this report on the future of work. It sheds light on many trends and changes we have seen over the last decade – as well as looking forward to how the future may unfold.

The working world is moving at lightning pace. Jobs are changing, how we work is changing, and even where we work is changing. According to a well-known viral video, the top ten jobs two years ago did not exist eight years ago. This has undoubtedly changed again since – and we must continue to try and prepare our children for jobs which do not yet exist!

As the working world is changing, the macro-environment continues to put pressure on current and future workforces. Rising tuition fees and changes in education systems mean a workforce which may come from a radically different learning environment to its managers, less inclined to classical hierarchies, better able to multitask and more suited to mobile working.

The wider economy is also impacting our workforce – the removal of countries from the Eurozone, for example, may mean more favourable exchange rates and cheaper labour, causing a shift in certain jobs from countries within the Eurozone to these newly ‘freed’ nations.

There is little doubt that we are living in a volatile, uncertain, complex and ambiguous world.

- To compound these changes, we are constantly adapting to new technologies. While this can be stressful for some, many organisations are realising the importance of intuitive technology.
- We have seen the move from technology as an awkward, ungainly creature to something which can be a pleasure to use. Consequently, technology has genuinely started to support business rather than hampering its users.
- Technology can support us through these changing times, which is especially important when nurturing people.

Indeed, the challenges of supporting a workforce through this era are unprecedented – and call for a mature change in leadership styles and using technology to make effective decisions. Trust, the ability to deal with complexity and to manage a workforce you may never meet, are all essential pre-requisites for success. They will be increasingly important in the future.

Admittedly, all this adds up to a great deal of ‘information overload’. Many of us will find it difficult to make the time to read the entirety of this report – but I would implore you to do so! If anything, it highlights the need to be ruthless with unnecessary information and to centralise information gathering and analysis. Nowhere is this more critical than people management – to optimally support and develop a workforce, one must have an understanding of their personal development and skills, as well as the external environment which is affecting them. This is no easy task, but is critical to success in the modern world.

**Vincent Belliveau**  
Senior VP and General Manager of EMEA  
Cornerstone onDemand



Dr Carsten Sørensen



Gillian Pillans

## About the author

### Dr Carsten Sørensen

Dr Carsten Sørensen is a leading authority on organisational innovation with information technology and the future of work. He lectures in Information Systems and Innovation at the London School of Economics. Since 2008 much of his research has focused on the organisational and societal implications of infrastructure digitalisation. He has acted as an adviser to various research bodies on the future of work and has consulted for a range of organisations, including Microsoft, Google, Telenor, PA Consulting Group and Carphone Warehouse. Dr Sørensen can be contacted at [c.sorensen@lse.ac.uk](mailto:c.sorensen@lse.ac.uk) or on his homepage, [www.carstensorensen.com](http://www.carstensorensen.com).

### Gillian Pillans

Gillian Pillans 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 was author of *Developing an Effective HR Strategy* and has co-authored other CRF reports.

## Acknowledgements

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## About CRF

Founded in 1994, the Corporate Research Forum is a membership organisation whose international focus is on research, discussion and the practical application of contemporary topics arising from people management, learning and organisation development. CRF has become a highly influential focal point and network for over 100 members representing a cross-section of private and public sector organisations.

- Its annual programme of research, events and publications fully reflects members' interests, in addition to the annual international conference. Side meetings and interest groups are also initiated to meet challenges that members might have.
- Contributors are acknowledged experts in their field with a worldwide reputation as leaders and innovators in management thinking and practice.
- Sharing and collaboration among members is a key feature of CRF's activities. We actively encourage networking at all events, and especially through member lunches and HR director dinners.
- The Forum is led and managed by highly regarded former HR professionals who have a passion for delivering excellence in the leadership and development of organisations and people.

CRF's goal is to be valued for excellence, rigour, relationship building and providing an independent view which, together, lead to measurable improvement in members' people and organisation performance.

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# Executive Summary

- 1 This report examines the key trends that will influence the future of work, and highlights the tensions and contradictions organisations face in considering how to respond. The implications for leaders and HR are explored and tools and advice are offered to help plan for the future. The key trends and implications are graphically shown in the column.

## Macro trends

- 2 Five macro trends are evident
  - Globalisation, with its consequences and risks.
  - Shifts towards sustainability in business.
  - Population growth, ageing, and new generation needs.
  - The rise of emerging economies.
  - Technology.

These are considered within a global context described as VUCA – volatile, uncertain, complex and ambiguous.
- 3 Working life is increasingly dominated by technology, which offers both opportunities and challenges. These include developments in mobile technology, cloud computing, the potential of big data and analytics, harnessing collective intelligence through, for example, crowd-sourcing – and the possibilities offered by social media and gaming.
- 4 We find significant implications for relationships between organisations and customers, as self-determination and choice become key drivers. Shifts are occurring from an age of mass production and economies of scale towards customisation at low cost, automation and customer self-service.

Highly codified and scripted interactions with agents in call centres will be replaced by warm customer relationships using cold technology.

## The effects

- 5 Future trends will affect work in different industries in different ways. We identify three types.
  - Transformational work, such as building or manufacturing which, increasingly, is moving to emerging economies.
  - Transactional work, which at present is carried out in call centres, is being automated, outsourced or moved offshore.
  - Interactional work, based on knowledge and expertise, will be enhanced rather than replaced by technology.
- 6 Organisation design is a key consideration. Four trends will shape how firms are structured.
  - Networked organisations, where many objectives are achieved through partners and external contributors rather than permanent employees.
  - Virtual organisations, where non-core activities are outsourced.
  - Flat organisations which replace hierarchies with fluid, flexible project teams.
  - Decentralised organisations, where decisions and innovations are shaped by those closest to the customer.

Organisations can combine some or all of these features as they consider how to design for the future.

## Workplace factors

- 7 Flexible working will be essential in the future, becoming more widespread and with many options for where, when and how people work. It will produce significant business benefits. However, organisations will have to manage difficulties such as knowledge exchange, and re-examine management practices to ensure they support new ways of working.

Better means of production and innovation, new forms of organisation, new kinds of work, different types of workplace relationships – and far-reaching consequences for the unwary organisation, or the unwitting HR function. This is the future of work.

- 8 The full-time, permanent workforce is shrinking as people choose to work independently, and economic necessity forces them to accept itinerant work. Technology will accelerate this trend, enabling companies to source labour at low cost from anywhere in the world.

Workforce diversity will continue to have a significant impact. The implications for careers and talent management are considerable.

#### Paradoxes of future work

- 9 We identify several paradoxes facing organisations.
- Balancing growth through innovation and new markets versus maximising returns from existing businesses. We discuss the notion of the 'ambidextrous organisation' and how it may help resolve this dilemma.
  - The proliferation of technology and flexible working means work can be done anywhere, anytime – which, paradoxically, necessitates boundaries to avoid burnout.
  - Similarly, flexible knowledge work makes supervision more difficult, resulting in performance management by outcome rather than input and process.
  - Conversely, observing work activities in real time becomes possible through widely available and affordable technology – this implies more scrutiny of work, even though workers may be physically remote from managers.
  - The parallel challenges of having to produce at lowest cost, with demands for high quality, individualised customer offerings. How automation, self-service and other technologies enable firms to overcome this challenge are examined.

#### Implications

10. The wide-ranging implications of the future of work are discussed. Leadership teams need to consider how practices have to evolve. For example,

- how organisations improve their scanning capability so that future trends become a key part of strategy and people management
- the new style of leadership required – shifting from traditional command-and-control towards leaders who can communicate their vision in the face of complexity; those who are externally-focused and have the foresight to identify opportunities; and those who create collaborative environments that foster innovation
- the implications for talent management. Flexible career structures will be needed because of diverse workforces, new generations with different work expectations, and an ageing workforce wanting to remain economically active post-retirement age
- the success factors in virtual, decentralised, network organisations will be different, which must be reflected in new forms of leadership development
- reward practices will change in the face of increased data transparency and linkages between outcomes and pay
- opportunities offered by new technologies such as social media will enhance engagement and employer brand development.

#### The HR focus

11. The future of work presents an opportunity for HR to demonstrate leadership. However, functions will have to be well-informed, well-networked and prepared to challenge the organisation to maximise the business benefits offered by future work trends.



## FUTURE FORCES AT WORK

Topics covered		Introduction
<b>1.1</b> Future imperfect	10	This chapter indicates five key drivers – described in depth in Chapter 2 – we think are likely to shape the future of work, and the global economic and social context. It also describes how the research was conducted and the report structure.
<b>1.2</b> Research brief and approach	10	
<b>1.3</b> Key forces for the future	10	

“There are known knowns; there are things we know that we know. There are known unknowns; things that we know we don’t know. But there are also unknown unknowns – these are things we do not know we don’t know.” **Donald Rumsfeld, ex-US Defense Secretary.**

#### Future images and reality

- Images of the future tend to show us either Utopia or Dystopia, and predictions can be both conventional and extreme.
- They tend to over-emphasise advanced technologies placed in conventional social settings, when the reality is that technology, society and organisations progress in tandem – not always at the same pace.
- For example, a video predicting modern life with extensive use of Facebook would only a decade or two ago be classified as an Orwellian privacy intrusion.
- When the future is reached many predictions fall away – such as jetpacks for all, underwater cities and food in pill form. Those that have become reality become an ordinary part of everyday life.

## 1.1

### Future imperfect

“Prediction is difficult, especially about the future,” is a quote attributed to several people including Albert Einstein, Niels Bohr and Yogi Berra. It feeds our desire for some certainty of what is ahead, despite the impossibility of achieving this. There is no shortage of trend spotters, futurologists and others who make it their business to offer future views.

- Such speculation is both problematic and useful, representing an uneasy relationship between research – which can either be extreme or unrealistic – and practice.
- This reflects trends apparent today but which need to be extrapolated into the future. See the column notes.

Considering the column notes, we have shied away from making predictions about specifics, in favour of focusing on the trends we think will have greatest impact, and how they are being applied in practice – recognising that common practice for one company may be radical for another. Tensions and contradictions organisations struggle with are highlighted.

Finally, practical implications for leaders and HR, along with advice and tools to help plan a route towards the future of work, are provided.

## 1.2

### Research brief and approach

Our research includes the perspectives of leading academics and specialist practitioners, interviews and a literature review, as well as experiences of more than 20 organisations. A full list of interviewees is provided in the Appendix. Our online member survey received 33 responses from 23 organisations.

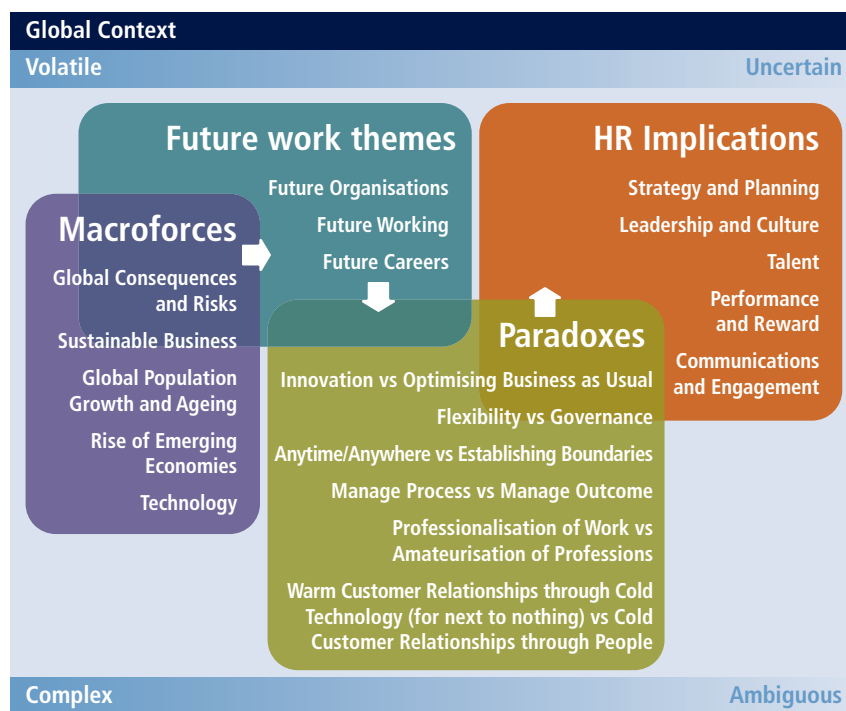
## 1.3

### Key forces for the future

Considering the future of work requires that political, environmental, economic and technological conditions influencing business outlook are taken seriously. The five macro themes of globalisation, sustainability, demographics, emerging markets and technology set the essential context and are described in Chapter 2.

In today’s hyper-connected world, like the butterfly’s wings in chaos theory which trigger a hurricane on the other side of the world, local problems can quickly take on a global scale. Recent examples include the impact of the Euro crisis on global financial markets and the Japanese tsunami, the latter leading in many countries to rethinking the use of nuclear power. The trends identified reflect our own views as well as those of leading thinkers.

One over-arching theme, according to Bob Johansen of the Institute for the Future, is that we live in a VUCA world – one of Volatility, Unpredictability, Complexity and Ambiguity. The key message is that the pace of change is constantly accelerating. The VUCA environment is here to stay.



## THE GLOBAL CONTEXT SHAPING THE FUTURE

Topics covered		Introduction
<b>2.1</b> Globalisation – consequences and risks	13	This chapter examines in depth the five themes that make up the context for future work – globalisation, sustainability, demographics, emerging markets and technology. The implications for organisations and HR are commented on.
<b>2.2</b> Sustainable business	14	
<b>2.3</b> Global population growth and ageing	14	
<b>2.4</b> Rise of the emerging economies	16	
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### When the unexpected happens

- The domino effect on supply chains of the 2010 Icelandic ash cloud was considerable.
- Similarly, a faulty trading algorithm launched by Knight Capital in July 2012 resulted in the company losing \$400m.
- Here, inter-connectedness on a dramatic scale means the system can complete around 165,000 separate trades in the same time it takes Usain Bolt to react to the starting pistol.
- These examples reveal the potential side effects of the closer linking of business processes through computer systems.

Most writers on the future of business advise that managing a variety of risks is an everyday concern for most enterprises.

- As BP discovered in the Deepwater Horizon incident, accidents can have wide political, environmental and economic consequences.
- The collapse of firms such as Lehman also highlighted the inadequacies of internal risk controls.

## 2.1

### Globalisation – consequences and risks

Thomas Friedman's bestseller, *The World is Flat*, provides a compelling perspective on globalisation of business, where geographic and other barriers are removed through a series of forces 'flattening' the world.

- New technologies supporting global internet access, workflow management, and information sharing.
- New business practices combining outsourcing, off-shoring, supply chain management, and insourcing.

This flattening has caused many business innovations – distributing manufacturing processes across the globe resulting in cheaper products, for example. It is based on tighter coupling, through high-speed connectivity, and the integration of complex institutions and activities. However, an increasing reliability on systems to manage complexity has risks that have to be expertly dealt with. Consider the events in the column.

Generally, risk management is becoming a key factor in the way companies are run, from operational concerns for employee health and safety, to concerns for financial and strategic risks.

#### Talent consequences

Globalisation has particular consequences for HR in talent planning and management.

- Organisations increasingly need high calibre local talent – Unilever actively develops talent in local markets, and has capped its numbers of expatriates.
- Talent shortages are critical risk factors for many organisations. *The Economist* reports that around one-third of employers worldwide have difficulty hiring in some job categories and locations. And, according to Manpower, 46% of senior HR executives globally, reported that not recruiting the right talent made strategy implementation more difficult.
- Deloitte's *Talent Edge 2020* report found growing talent shortages in the Asia-Pacific region among 61% of surveyed executives – R&D, operations, procurement and supply chain were particular pinch-points. Similar results, though less severe, were occurring in the Americas and EMEA.
- Offshoring activities to lower-cost countries continues – the Philippines is an emerging player – while organisations are being more adventurous about the functions they offshore. Mercer have chosen to transfer some actuarial work to centres such as Portugal, India and Belfast, in a profession that is traditionally fiercely protective of its expertise and local knowledge. Its specialists, as in the UK, can now focus on high value-added work.

- Countries successful in attracting inward investment, must continue to invest to maintain their advantages – increasing labour costs in the Far East makes competing purely on price more difficult, and China's need to invest in high-tech manufacturing techniques, such as robotics, are examples.

## 2.2

### Sustainable business

Sustainability is a broad issue directly influencing future business conditions. The availability of fuel and water, CO2 emissions, global warming and other environmental issues are not only part of a global media debate, they are real issues for many companies, often with significant bottom-line impact.

#### Unilever sustainability plan

Irrespective of individual beliefs, scientific and political opinion agrees that humans have significant negative impacts on the environment – creating new risks, such as legislation, rising costs and reputation management, as well as threats to future business opportunities.

This development is illustrated by Unilever for whom, says Julie Hudtohan, Global HR Director for HR, sustainability represents the company's view of the future. The Unilever Sustainable Living Plan incorporates the company's vision of doubling its size while reducing environmental impacts. As Hudtohan explained, this is more than about managing more sustainably – it is a new business model covering manufacturing inputs and the entire product life cycle from sourcing to consumer use. The business case is based on

- consumers asking for it
- retailers increasingly demanding it
- fuelling product innovation
- growing markets around the world
- saving money.

Hudtohan also sees a positive effect on the employer brand – the sustainability message is consistent with the values of a new generation of potential leaders.

Many interviewees said the sustainability agenda is also having a significant impact on business travel. A combination of flexible working, better technology such as telepresence, and corporate attitudes hardening towards such spending, is reducing face-to-face meetings.

## 2.3

### Global population growth and ageing

As well as the global population increasing in size, growing older and shifting East – as the column notes – it is increasingly urbanised. For the first time ever, in 2008, just over half of the world's population lived in cities. This proportion is projected to grow significantly in coming decades to 70% being urbanised by 2050, (UNFPA, 2007).

### Population facts

- It took an estimated 250,000 years to reach the first billion inhabitants on Earth and subsequent billions have arrived at an increasing pace.
- In October 2011, the seven billionth person was born – and it is estimated that by 2050, nine billion people will inhabit Earth.
- The population is also ageing significantly – around 20% will be over 65 by 2100, and birth rates are dropping in richer nations.
- This, along with policies such as China's one-child rule, means a smaller youth population to support retirees.
- The one-third of the global population currently living in rich countries will only represent around 13% of the global population by 2100. Global migration will increase.

### Demographics

According to Wikipedia:

- baby boomer is a person born during the demographic post-World War II baby boom between 1946 and 1964
- Generation Y are those born between the late-1970s/early-1980s and the early 2000s.

Talent shortages are becoming more acute as the baby boomer generation retires. According to the *Economist*, in 2008 one in four US workers with a degree in science, technology, engineering or mathematics was 50 or over. At the same time, baby boomers are healthier in old age and capable of working longer than previous generations. Many do not want to retire – and organisations are increasingly having to adopt flexible careers and working practices to accommodate them.

Conversely, Generation Y is becoming prominent in the workplace. This is the first generation – dubbed 'digital natives' – to grow up with the internet and social media. It will be interesting to discover the impact this has on their brain development and behaviour.

- Much has been made of their different needs and expectations, and how organisations should respond in marketing and employing them. What seems clear is that they are more comfortable with technology – and with the uncertainty of the world economy in recent years.
- The new generation has a broad, but short, attention span, which may have implications for product development, structuring work and education.
- Many commentators emphasise how much value they place on finding meaning at work, and their expectations of flexibility.

We encountered scepticism about whether their idealism will survive the cold reality of mortgages and family responsibilities as they age. Indeed, Maitland and Thomson in *Future Work* point out that baby boomers also want greater control, autonomy and choice about where, how and when they work.

Clearly, companies need to respond if they are to attract the best talent from the younger generation. For example, Gary Marshall, Group Head of Talent at Clarks, described how it is sometimes difficult to attract new generation talent – for whom mobility and flexibility are increasingly important – to its base in rural Somerset. Managers, who have grown up in a traditional manufacturing or office environment, now have to accept new ways of working – such as home-working – if they are to attract the capabilities needed to develop a global shoe brand.

**“Human development will stall without artificial intelligence.” Peter Cochrane, consultant and ex-CTO, BT.**

Clarks is also expanding its global reach to new markets such as China, and decisions regarding range, stock and pricing – which previously were made centrally – are now increasingly being made locally to suit regional tastes.

We find that organisations need to re-think the employment contract, irrespective of specific generation expectations. Annemie Ress, Global Head of People Innovation, eBay, says their people are less driven by goal-setting and career development in favour of end-to-end responsibility and mastery in their chosen field. Finding meaning in what they do, and feeling they make a difference, is an important motivator.

However, working life will not be easy for the new generations. Several commentators expressed concern about whether the education system is providing them with the work skills they need, as noted in the column.

## 2.4

### Rise of the emerging economies

Global purchasing power has shifted significantly in the last two decades, especially to the BRIC emerging economies – Brazil, Russia, India and China. These and similar economies have experienced significant growth fuelled by offshoring/outourcing business activities, manufacturing to meet global demand and exploiting natural resources.

Whereas flows of inward investment in previous decades were largely from West to East, this is now moving in the opposite direction – China Investment Corporation’s sovereign wealth fund purchasing stakes in western investment banks, is an example. As the wealth of emerging economies develops, so will their global political influence and power.

The USA still remains the world’s largest economy, with GDP per capita about four times that of Brazil, and nearly ten times that of China, according to Wikipedia. It also benefits from a business culture of entrepreneurship and innovation – and in the short term, is unlikely to give up its lead.

But, global economic distribution in 20 years’ time is likely to be different. It has been argued that by 2050 the emerging economies will no longer be emerging and the large economies will no longer be large.

### Challenges of work

- Owen Ferguson, Product Development Director at GoodPractice, the e-learning provider, says the younger generation’s ease with technology can be superficial – and they have difficulty judging the quality and validity of information from search engines such as Google.
- Mike Jackson, Chairman of Shaping Tomorrow, a future research and analysis service, thinks young people often have unrealistic expectations.
- “They need to stop thinking certain jobs are beneath them and be prepared to start at the bottom.”
- The debt burden may also discourage today’s students from completing higher education.

Neil Morrison, Group HR Director at Random House, thinks his industry – which has traditionally paid fairly low starting salaries, compared with other industries, for the level of educational background they require – may struggle to attract top talent with large loans to fund.



### Big data examples

Simon Haines of Deloitte's HR Analytics practice, described how big data is being used internally to improve practice management and externally as a service to clients.

- The company wanted to determine the possibility of predicting areas within the firm with potential for high attrition. Each 1% drop in unwanted attrition would result in £30m annual savings.
- By correlating the attributes of people who left, Deloitte identified individuals likely to leave in the near future. These were then targeted to encourage them to stay with the firm. As well as reducing turnover, this led to improvements in morale and productivity.
- A client used analytics to assess the business impact of training 20,000 engineering staff. The analysis brought together diverse data sets including operational data, engagement surveys, training effectiveness assessments and employee data.
- A more complete picture of the impact of training on performance and attitudes of those who had taken part was developed.

## 2.5 Technology

Much has been written about the many technologies that will shape work and our social lives in the future. Below are developments we think will shape the future of work.

### Mobile

The ability to carry increasingly powerful computers as smart phones, tablets or notebooks is still in its infancy. And combining more sophisticated devices with advanced networking and remote data services via the Cloud means mobile technology will become increasingly important. That said, it can also become a means of control and micro-management – and 24/7, 'always on', can be a source of stress and burnout.

### Cloud computing

- This involves the delivery of computing services such as software, storage, etc, by a third party over a network, reducing the need for organisations to have their own servers, data rooms and networks. Instead, they can 'lease' software on the Cloud making data services a simple utility like electricity.
- They can also quickly scale up or down their storage or processing capacity.
- The Cloud is having a significant impact on innovation, as services can be rolled out quickly to users – and there is no need for software upgrades and costly maintenance of legacy software versions.
- Cloud services also work well with smart mobile devices, providing large-scale storage and complex computation, accessible from anywhere.

### Big data

Vast amounts of data from disparate sources can now be stored and processed easily. Combined with emerging techniques in data analytics, some organisations achieve competitive advantage by bringing together internal and external data to make connections and predictions that would not have been possible a few years ago.

Formerly CTO of BT, Peter Cochrane, who advises on future strategies, believes this will be one of the biggest future developments, allowing machines to make faster and better decisions than humans ever could. "Using Cloud computing and smart technologies to draw inferences, makes previously undiscoverable connections and anticipates user needs to create possibilities that can scarcely be imagined today." See the column for examples of big data in practice.

### Case notes

Some organisations are now looking beyond traditional metrics, such as tenure and time to hire, towards sophisticated predictive metrics which include assessment data and the measure of potential. SHL sees rising demand for their global talent analytics database to benchmark customer talent pools against geographic and industry sector standards. The wealth of assessment data SHL holds enables customers to tackle more strategic talent questions such as the following.

- "How does my senior leadership team compare to others in my industry and geography?"
- "Are my middle managers capable of driving and supporting the change my organisation is facing over the next 18 months?"
- "Am I attracting and recruiting the best graduates in my sector?"

Aviva has recently completed a pilot to equip its sales force with iPads which integrate information and data from the various sources they use when meeting customers. Previously, preparation for sales visits could take up to four hours, due to the manual calculations required which the new technology has eliminated. Now, sales staff can spend more time with their clients who are impressed with the information they receive.

### Ubiquitous computing

Combining mobile devices with technology embedded in the environment allows for new services in providing personalised information at specific locations – updating traffic information, for example. London Transport's Oyster card is a good example, and such non-touch technologies will become important both for payments and easy interaction in other contexts.

### Digital service platforms

As Apple's App Store has shown, vast numbers of developers and customers can be engaged around digital service platforms based on self-service and easy updates of simple smartphone apps. As this concept develops, more complex enterprise services will have apps, driving down price and giving users more power.

### Further technological trends

#### *Collective intelligence*

- The internet is enabling new forms of collaboration where specialists or generalists can solve complex or simple problems. This is often known as 'crowd sourcing', where tasks are assigned to online groups of people.
- For example, Amazon's Mechanical Turks are paid tiny amounts for simple 'clickworking' and Procter & Gamble's Connect+Develop has transformed the company's new product discovery.

#### *Social media*

- Facebook and Twitter have transformed social interactions, and the same is happening at work with tools such as Yammer and LinkedIn. These can be organised within the enterprise, or along knowledge supply chains, to be used by people who work together or like-minded groups.
- The implications for organisation communications and information access are profound. Similar implications will result with social media and collaboration technologies moving away from text towards video as bandwidth increases.

#### *Gaming*

New generations of employees have grown up with computer games and virtual worlds such as Second Life. The corporate world is beginning to explore the possibilities of gaming and simulation technology in areas such as training and assessment.

(continued in next column)

“The consumption shift in Ford’s time was from the elite to the masses; today, we are moving from an era of mass consumption to one focused on the individual.” **Zuboff, 2010.**

#### Further technological trends (continued)

##### **Machine-to-machine (M2M) services**

- Explosive growth is being experienced in networked devices exchanging data and directing each other. This relates to the ‘Internet of Things’ – the widespread identification and networking of objects.
- An example is the electronic tags placed on pallets of wine which automatically communicate temperature fluctuations during transport to a reader at the receiving warehouse.

##### **Emulating human capabilities**

- Human interaction with technology has remained relatively stable for decades through the use of keyboard and mouse – small changes here can make significant differences, as the clever use of touch as input to mobile phones and tablets has demonstrated.
- Human interaction mechanisms such as speech recognition and machine translation – Apple’s Siri digital iPhone assistant is one example – are now improving.
- This is giving rise to productivity tools such as digital assistants and avatars which can represent humans in cyberspace.

## 2.6

### **Customer needs and expectations – from Fordism to Amazonism**

The trends in this report will not just affect relationships between companies and employees, but also will have major implications for the types of products and services provided and how they relate to customers. As Shoshana Zuboff notes, increases in education, living standards, social complexity and longevity, over the past century, have given rise to a new desire for individual self-determination. This individuality is now moving into tools and relationships enabled by interactive technologies.

- Amazon.com, Apple, eBay and YouTube are all examples of highly customisable solutions that enable consumers to have a unique experience.
- Traditional features of capitalism – economies of scale, asset intensification, concentration and central control – are less important. Individual choice, facilitated by technology and delivered at low cost, is becoming critical.
- New communication technologies also make it possible for large companies to engage with customers in unanticipated ways. This can be a two-edged sword. Imagine their surprise when Apple co-founder, Steve Jobs, personally called a customer regarding an e-mail complaint (YouTube, 2011).
- The opposite, however, is more common. A global discussion can suddenly emerge about a company’s products and services, which it needs to respond to. If left to individuals or groups within the organisation or even worse, ignored, the results can be disastrous.
- One famous example is the YouTube video in which the Canadian musician Dave Carroll performs his song, United Breaks Guitars, telling the story of how United Airlines damaged his guitar. The video had reached over 12 million views by August 2012 – and made the singer’s career at the expense of United’s reputation.

The power of information technology to challenge how companies listen to, and engage with, their surroundings should not be under-estimated. It has implications for both leadership teams and HR, as they develop their response to future trends and plan activities such as resourcing, training and leadership development.

## THE SHAPE OF FUTURE ORGANISATIONS

Topics covered		Introduction
<b>3.1</b> Global context effects on organisations	21	Given the context and themes set out in Chapters 1 and 2, how is the corporate world responding to the opportunities and threats presented? In this chapter we review the types of organisations that will be able to respond to challenges in the future. Key developments and practical applications are described.
<b>3.2</b> The networked organisation	21	
<b>3.3</b> The virtual organisation	22	
<b>3.4</b> The flat organisation	24	
<b>3.5</b> The decentralised organisation	24	

“The future is already here – it's just not evenly distributed.” **William Gibson**. “Knowledge-intensive, service-driven, or consumer-facing businesses will be particularly affected.” **Celia Baxter, Director of Group HR, Bunzl**.

## 3.1

### Global context effects on organisations

Few organisations will be unaffected by the trends described in this report. However, different organisations and industries will respond in different ways. For example, the degree of flexibility that a small start-up can adopt will be different to that of a large multinational. The McKinsey Global Institute's three types of work diagram below is helpful in interpreting how different sectors and organisations may respond.

Type of work	Characteristics	Future Development
Transformational	Jobs involving physical activity such as construction or manufacturing	Long-term decline in rich countries; shifting to emerging economies
Transactional	Routine jobs in call centres or banks	Often still done by people. Increasingly being automated, offshored or both
Interactional	Rely on knowledge, expertise and interaction with others, such as high-end legal services or consultancy	Inherently difficult to standardise. Technology enhances rather than substitutes. Still achieves high margins

Adapted from McKinsey Global Institute, reported in *The Economist*, 10 September 2011

How have new organisations begun to shape themselves for the future? We highlight four emerging models – networked, virtual, flat and decentralised. Some adopt a combination or, indeed, all of them, depending on the extent to which they need to

- make better decisions faster and more flexibly
- adapt to local markets and customer needs
- drive down costs by focusing on core capabilities
- find the best sources of innovation, whether internal or external.

## 3.2

### The networked organisation

The fact that companies no longer have all the resources they need to succeed – particularly with innovation and new product development – was confirmed in our research because they cannot afford to recruit or retain specialist skills. A concept featuring in the literature is that of the ‘networked organisation’. Rather than trying to employ all the necessary skills and capabilities, such enterprises bring together networks of contributors – whether other firms or individuals.

#### The networked organisation – examples

- A good example is how apps are developed for Apple products.
- The overwhelming success of the iPhone and iPad is partly explained by the wide range of services available through the App store.
- Most apps are developed by third parties, but vetted by Apple before being sold through the App store. Apple is a famously secretive company, but achieves a much richer user experience through collaboration with developers.
- Similarly, large organisations we interviewed, including Unilever and Tesco, are changing their view of internal versus external capability and becoming much more open to ideas from outside their traditional boundaries.

“Tesco have recognised that we do not have all the answers internally and have become more open to solutions from outside.”

**Maxine Dolan, Group Leadership Development Director, Tesco.**

In these situations, the role of manager is more externally oriented, assembling networks of specialist contributors to fill any gaps. Collaboration is key. This organisation cuts across traditional hierarchies – and particularly threatens middle managers whose role traditionally is to filter information flows and activities between the front line and senior management. See the column for an example.

#### Collaborative value creation – Logica’s GIVP

Logica’s Global Innovation Venture Programme is an annual innovation contest to identify companies with technology that helps reduce costs and improves services for clients. Short-listed companies then develop the solutions and bring them to market with Logica’s clients. This gives access to cutting edge technology that would not have been developed in-house, while partners have visibility in a global marketplace. Previous winners include an application that turns desktop software into mobile-like applications – and a product that allows networks of organisations to share information from disparate systems across multiple platforms.

### 3.3

#### The virtual organisation

Although not new, outsourcing seems to be a feature of future organisations. Many we spoke to told how the costs of performing activities internally were constantly scrutinised, and the definition of core and non-core was shifting. More companies now focus on narrowly-defined core activities and outsource everything else – that is, they become virtual.

- Intercontinental Hotels Group’s global innovation team has been largely staffed by consultants. Their approach is to have a small core team of specialists – headed by an internal leader of Innovation and design, supported by a network of consultants which can be leveraged across different innovations projects. Many organisations would view innovation as an in-house activity, given that it is often regarded as a core capability. However, IHG found that attracting and retaining the right calibre of permanent employees was difficult.
- Some organisations are outsourcing aspects of the finance function which are now considered non-core.
- Now, global specialisation of activities offers many, higher quality services to be delivered offshore, more cost-effectively and flexibly – Apple employs 63,000 direct employees worldwide and 700,000 working for contractors producing parts and assembling products in Asia.
- The decision to offshore was motivated less by cost than by flexible availability of skilled workers in large numbers. According to a former Apple logistics manager, “What US plant can find 3,000 people overnight and convince them to live in dorms?” – as they do in China (Duhigg & Bradsher, 2012).

- New global players are also emerging, such as the Philippines, a leading provider of business process outsourcing globally.

Conversely, many organisations are insourcing previously outsourced activities – Cadbury have reversed the outsourcing of market research and logistics, for example. Others such as Santander have brought back onshore customer contact and some HR activities which they realised were key to their competitive advantage.

Rick Emslie, Deputy Chairman of AdviserPlus, says his clients are becoming more discriminating about what they outsource and/or offshore. They recognise that while transactional work may suit offshoring, situations that require cultural understanding, for example, need to be delivered closer to home.

He finds that companies are using criteria other than cost – such as whether the outsourced provider can do a better job – to determine where the boundaries should lie. Organisations need to re-assess how and where they have competitive advantage, and focus on those areas, and then leave the rest to their 'virtual' partners.

Undoubtedly, there are risks in choosing a virtual model, with a loss of control over some operations being an example – Apple faces controversies over the working conditions of Foxconn employees in China, and has been criticised by President Obama for failing to manufacture its products in the US.

#### Individual worker outsourcing

The web-portal oDesk is an example of an emerging company that facilitates individual worker outsourcing. It matches specific work tasks with one of its listed freelancers in software development, customer service, administrative support and sales. Its rating system means companies can view the work history of the freelancers they use and select accordingly, much like buying from a rated seller on eBay.

In 2011, oDesk brokered work for 250,000 firms and around 1.3 million registered contractors. Much comes from richer economies and is done by workers in developing economies, such as the Philippines and India – typically at around 10% of traditional costs. Such services are accelerating globalisation as work follows time zones, and they are having an impact on working patterns themselves. In some countries, contractors choose to synchronise their working hours to suit daytime in the US.

#### Arise – virtual organisation in practice

Virtual business process outsourcing provider, Arise, serves large companies in four countries. Its model is unusual in that its services are delivered by 26,000 Independent Business Owners (IBOs), all of whom work from home and are self-employed. The firm itself has just 250 direct employees working in IT, telephony, sales and marketing.

Arise sees the following advantages in operating this way.

- **High commitment levels from IBOs.** Before working for a client, IBOs must have their own infrastructure at home, become accredited and attend online training in their own time. Service fees are linked directly to performance metrics and they select their working hours two weeks in advance, in flexible half-hour segments.
- **Matching IBO profiles to clients' needs.** Resource can be adjusted quickly for peak demand – one client flexed resource up and down by 300% in a 1.5 hour period. IBOs tend to be more diverse than typical call centres, so clients can request particular skill sets.
- **Higher productivity.** Call centres typically lose 40%-50% of productive time through breaks, holidays, training, etc. In this virtual model it is reduced to 25%-30% and can be as low as 10%. Some clients have seen costs per call lower than for a traditional call centre – with higher customer satisfaction and flexibility.

#### Agile project management

Owen Ferguson, Product Development Director at GoodPractice, described one of the key management techniques that allow new products – particularly software – to be developed rapidly in response to fast-moving customer requirements.

- This is 'agile' project management, described by Wikipedia as 'an iterative method of determining requirements for engineering and development projects in a highly flexible and interactive manner'.
- According to Ferguson: "The traditional waterfall approach to project management (as exemplified by the NHS IT project) is no longer possible in complex systems. By the time the requirements have been fully specified and a prototype has been developed, the world has moved on."
- Following the agile approach, a basic working prototype is delivered quickly, often in a matter of weeks rather than the months or years involved in traditional project management.
- It may not be perfect at first, but can be improved over time – and is better suited to complex projects that are difficult to specify in detail before work begins.

### 3.4

#### The flat organisation

Another recurrent theme is a shift towards flatter structures by organising work around projects, rather than a traditional hierarchy – which is something business writers advocate and has also been influential in strategy decisions for some years. The complex arrangement of global supply chains over the past decade is an example.

Another case in point came from the experiences of an interviewee, Lars Kolind, in transforming a Danish manufacturer, Oticon, in the late 1980s, from a loss-making hearing-aid maker to a global market leader. He did this by implementing what he describes as a 'spaghetti' management style – the world's first example of a flat, paperless organisation with flexible workstations and working arrangements. Formal titles were removed and a mentor-based system for appraising individual effort was introduced.

The resulting flat structure kick-started innovation and successfully re-launched Oticon to focus on solving the customer problem of achieving a better life with hearing impairment, rather than the narrower focus of making the best technical hearing aids.

The Vodafone case study described in Chapter 5 also illustrates some of the benefits of removing hierarchy and simplifying decision-making.

### 3.5

#### The decentralised organisation

Communication costs used to place severe limitations on how flat organisations could be without the burden of communicating becoming too high.

- For small enterprises, decentralised decision processes are relatively unproblematic as they can rely on informal means of communication.
- As they grew, they relied on costly communication technologies, which made centralised decision-making the only viable way of collecting information and disseminating decisions.
- We have inherited this way of thinking about organising large-scale, complex activities that need a high degree of centralisation.

However, modern communication technologies for large organisations can provide economies of scale without them losing the advantages of small organisations, such as creativity and flexibility. Technology enables large-scale decentralisation by reducing the co-ordination costs of Kolind's 'spaghetti' organisation. Many technologies described in this report also facilitate bottom-up co-ordination and collaboration, which lends itself to decentralised decision-making.



### Crowd-sourcing

Crowd-sourcing is becoming a key enabler of the future organisation, as problems can be solved and ideas generated by unknown groups of people anywhere in the world. Requests for assistance are posted online and anyone – amateur or professional – may submit solutions. Sometimes a monetary or other reward is offered, though the benefit to participants is often the kudos or intellectual satisfaction of taking part. Here are some examples.

- **Mechanical Turk.** Amazon's internet marketplace allows people anywhere in the world with a few spare minutes to work on 'micro-tasks' such as image tagging or writing product descriptions. Requesters post Human Intelligence Tasks (HITs) from which Mechanical Turks online – a scaleable workforce – can select, perform and be paid for. Requesters rate workers' performance by accepting or rejecting HITs, which affects their online reputation scores.
- **Procter & Gamble.** In 2000, P&G established the Connect + Develop open innovation initiative to boost innovation and growth. It is a web-based portal sourcing innovations and connecting these with in-house R&D. According to P&G, around half of new product development initiatives have essential elements drawn from external ideas or discoveries. This has led to a doubling of the success rate of innovations, an increase in productivity of around 60%, and a drop in the cost of innovation of around one-quarter.
- **Kickstarter.com** brings together people seeking funding for a creative project with potential investors. Much as in Dragon's Den, the creator sets a minimum level of funding and, if it is not reached, the backers are not charged. Backers receive rewards in kind such as DVDs – and not shares in any business emerging from the project. Since its launch in 2009, over 28,000 projects have been funded, with a total of \$336 million pledged by 2.6 million people globally.

## FUTURE WORKING AND CAREERS

Topics covered		Introduction
<b>4.1</b> From fixed to fluid working	27	This chapter introduces the key themes which characterise how the future of work is likely to develop – especially in flexible working and redefining careers.
<b>4.2</b> Flexible working	27	
<b>4.3</b> Careers redefined	30	
<b>4.4</b> Rise of itinerant workers	32	
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#### Disengagement with work

- A survey in 2011 of 11,000 employees worldwide by consulting firm, BlessingWhite, found that fewer than one in three (31%) was fully 'engaged' with their work.
- Nearly one-fifth (17%) were 'disengaged'.
- Engagement levels differ globally, being highest in India at 37% and lowest in China (17%).
- Europe and North America were at 30% and 33% respectively.
- Perhaps, controversially, we would question whether the current fashion of employee engagement among large companies will become less relevant, as self-employment and portfolio careers become more widespread, as discussed below in this chapter.

Source: 2011 Employee Engagement Report, BlessingWhite

## 4.1

### From fixed to fluid working

With the advent of blackberries, teleconferencing and home broadband, it is easy to imagine that working hours are now considerably longer. In fact, average hours have fallen from just under 60 a week in 1861 to around 42 hours today (BBC News, 2012). According to *CIO Magazine*, most executives work more than 50 hours a week. Workers are also financially better off.

However, if work has reduced in duration, it has increased in intensity. Studies show that individuals are required to give additional discretionary effort and work at greater speeds, with meetings often occurring across time zones leading to higher levels of stress. Business writer, Richard Donkin, points to the disappearance of previously slow periods used to reflect and recharge – and of long leisurely work lunches – as evidence. See the figures for disengagement in the column and note the following pertinent comments about future working.

"We are looking at a change whereby work that before was largely synchronous in time and place, except when a person worked one day at home or visited a customer, now becomes asynchronous for an increasing proportion of the population. People will meet up only when there are specific needs for collaboration or for celebrating achievements." **Lars Kolind**, author of *The Second Cycle* and *Unboss*.

However, Dubé and Robey (2009) raise difficult paradoxes that many organisations will face.

- Virtual teams function best when there are times for being physically present.
- Structures are critical to enabling flexible teamworking.
- Highly independent contributions make up interdependent teamwork.
- Social interaction is critical for successful task-oriented work.
- Mistrust is a key condition leading to a sufficiently high degree of team trust.

## 4.2

### Flexible working

One of the most significant workplace trends of the last decade has been the rise in flexible working. It began as changes in hours or part-time working, and was typically added to existing management practices. The term now covers options such as working hours, locations, hot-desking, reward by outputs rather than inputs and itinerant working without fixed contractual arrangements. There are many reasons for its coming into prominence.

- Pressure from employees, particularly with the increase of women in the workplace.
- Recognition of the benefits by organisations, including employee satisfaction and lower office costs.

“The trouble is that most cases of flexible working have simply been grafted onto existing management practices without reviewing or changing the underlying model of work and careers.”  
**Maitland and Thomson, 2011.**

- Employers responding to the challenge of motivating employees and keeping them committed.
- The availability of technology that facilitates remote working.
- Re-aligning working hours to suit customer demand.
- Societal changes.
- Organisations acknowledging that people do not always need to be physically present to be effective.

#### Case examples

There are many examples of companies adopting flexible working as described below and in the column.

- BT’s Work Smart strategy has introduced ‘homeshoring’ where call centre jobs are staffed by employees working from their own homes. This reduces the need for physical premises and avoids moving jobs to lower cost countries such as India. BT’s home-based operators are up to 30% more productive, as they can respond to fluctuations in call volumes.
- Logica actively encourages people to work from home. Its approach includes requiring staff to book desks at its London office, and no-one is allowed to do this for longer than three consecutive days.
- Retailers such as Tesco are becoming more flexible about shift structures, shift swaps and job shares. The company also offers students opportunities to work at different stores during term and vacation time.
- Nick Laird, Commercial Director at Ceridian, cited the example of a large retail client implementing a system allowing employees to ‘trade’ shifts between themselves without requiring manager authorisation, providing adequate cover is provided.

Maitland and Thomson in *Future Work* (2011) argue that adopting flexible working is futile unless accompanied by flexible leadership. They call for a complete overhaul of management practices, which we explore in more depth in Chapter 6.

#### Flexible working trends

- A 2007 study by Orange found that nine out of ten UK employees had at least one flexible working arrangement available if needed.
- However, in another survey of 3,500 white-collar workers across five countries, only just above a quarter were satisfied with the flexibility offered to them – and only one-fifth were encouraged by their employers to work remotely (The Future Foundation, 2010).
- The survey found significant national variations, with a third of US and a quarter of UK workers encouraged to work remotely – but less than 15% in France, Germany and Japan. Despite these numbers, almost 70% of the 100 HR managers surveyed said flexible hours have positive effects on staff productivity.

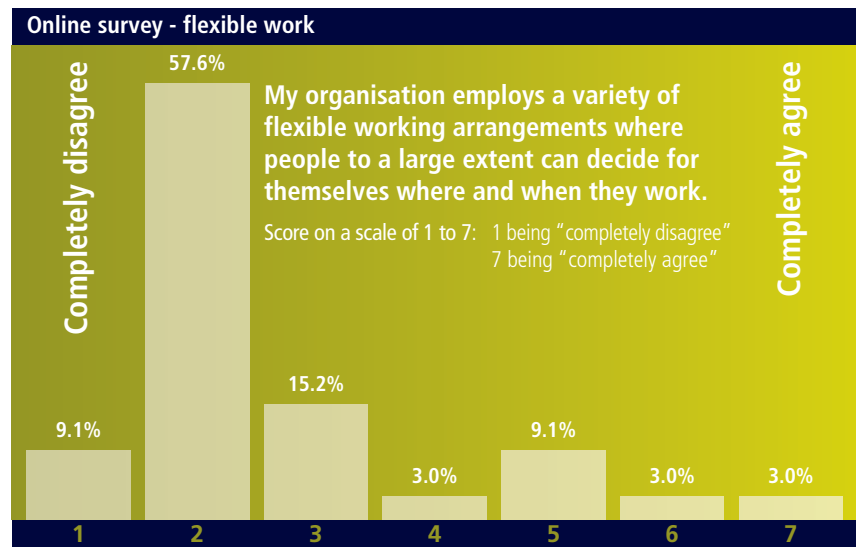
#### Unilever’s ‘agile working’

Unilever has introduced an agile working programme, with the object of cutting office space and making 30% of roles “location free by 2015.” It also contributes to the company’s sustainability vision discussed in Chapter 2. The following principles underpin their approach.

- All employees may work anytime and anywhere as long as business needs are met.
- Leaders must lead by example, working in an agile way themselves.
- Performance is driven by results, not time and attendance.
- Travel has to be avoided wherever possible.
- Managers are assessed and rewarded annually on how well they support agile working.

“We need to think about how to work in a more flexible way to enable staff to work smarter and more effectively, [if] not always from the office.” **Respondent to CRF member survey.**

Our member survey suggests that, although some form of flexible working may be available, there is still a long way to go before the type envisaged by Maitland and Thomson – where people have a high degree of autonomy over where and when they work – is widely adopted. Only 15% of respondents agreed with the statement, ‘My organisation employs a variety of flexible working arrangements where people can decide for themselves where and when they work’.



The differences in findings from these surveys suggest corporate attitudes to flexible working may have hardened in the recession, and attitudes differ by country. However, our discussions showed that companies generally are moving away from a perception that flexible working is simply accommodating employees or is a management inconvenience, and recognise clear business benefits.

#### Downsides and useful practices

There are, however, downsides to the flexible working evolution.

- Flexible mobile working can lead to the removal of seemingly unproductive meetings between people – although opportunities for co-workers to meet and socialise can be an essential part of disseminating knowledge. As GBS Bindra, Global Innovation Director and Strategy Leader at Logica pointed out, it can be difficult for younger team members to learn the necessary skills, and full-time homeworking may not be possible, without some crucial safeguards (see below).

- The effective and flexible exchange of knowledge in complex innovation work may need people to be situated near each other for rapid interaction and co-ordination. Innovation-intensive firms such as Apple and Google are known for requiring people to work from within the office complex rather than teleworking or homeworking. Such a demand from Google can be viewed as a counter-balance to the extremely decentralised innovation model the firm deploys, where engineers are actively encouraged to independently develop new services.
- Richard Donkin argues that humans will always need and want company – and, therefore, choose to engage in collective activities.
- Blurring the boundaries between homelife and worklife, or the times when workers are available or unavailable, poses risks to employee well-being.
- The rhetoric can go beyond what companies are prepared to deliver in practice, resulting in staff cynicism and disillusion.

However, the following practices are worth consideration if the benefits of flexible working are to be achieved without losing the advantages of workers being co-located.

- Be clear about the business goals to be met, such as understanding how customer demands are changing.
- Working apart in virtual teams requires some physical presence – kick-off meetings, frequent technology-facilitated meetings, and regular face-to-face meetings among people who depend on each other to establish and maintain a collaborative culture, are examples.
- Flexibly working apart requires structure – defining clear, flexible objectives and plans, keeping a shared calendar, standardising communication and documentation, and selecting team members carefully.
- Even simple, task-oriented, virtual teamworking succeeds through regular social interactions and people being able to develop relationships.
- Feedback, good performance measurement and control mechanisms are critical, as well as recognising and celebrating successes.
- Trust among virtual team members needs to be established and maintained.
- Managers inexperienced in managing virtual teams need training and support.

### 4.3

#### Careers redefined

Developments in the workplace are having a profound effect on careers and the availability of types of work. Fewer people are in full-time jobs for life, while unemployment has risen considerably across the western world.

#### Flexible work locations

- The integrating of new working practices and IT innovation produces changes to the way work is anchored to a specific location.
- According to Unwork.com, around 45% of all office desk space is vacant at any one time, offering opportunities for cost savings.
- Many mobile employees work from home, their car or even the local Starbucks.
- There is also the rise of a 'Third Place'. Neither office nor home, they are hubs where people from different organisations can work and benefit from the social aspects of co-location without the need for lengthy commutes.
- One example is wework.com, which provides fully-equipped office space for itinerant workers.
- Research by Carsten Sørensen identifies a rising tribe of 'digital nomads' who spend one-third of their time in the office, a third at home and one-third in transitional places.
- "If one's workplace is mobile then this also means goodbye to the traditional office. It changes the place, time and context of work. This also implies that interactions with others become virtual." Lars Kolind.

“If you are really interested in career security, smaller organisations may be better than large ones, because they’re more flexible.” **Bob Johansen, Institute for the Future.**

Thomas Friedman of the *New York Times* has graphically described this as the ‘end of average’, where the previous assumption that average education leads to an average job (mostly in manufacturing) with an average income. Aspiring middle classes in the West no longer have access to mid-level manufacturing jobs, which are being offshored to the Far East. Similarly, the rise in automation of white collar work means fewer administrative and customer service roles – see Chapter 5.

- A paradox thus occurs where workers are either upskilled or deskilled as a result of the changes. Some commentators argue that increased automation and managerial control will result in a deskilling of the workforce – others contend that the increased complexity of work and reliance on technology requires a highly-skilled workforce.
- The answer is probably a combination of the two – administrative jobs becoming little more than human inputs to mainframe computer systems, and more specialist positions dealing with the inevitable exception handling from automated processes.

Bjarne Kaavé, Process Architect at Tryg, a Danish insurance company, described how automation might result in fewer staff doing routine insurance work, say from 1,000 to 500, and an increase in jobs for staff doing complex work from 100 to 200. Therefore, although the increased complexity arising from automation creates some work, the net result is fewer jobs overall.

This, though, is not the complete picture.

- The rise of the ‘service society’, and increased work complexity, requires both better skilled workers, and a range of new professions, such as management consultants, health and safety professionals, engineers in charge of highly complex installations, etc.
- Since the 1950s, managerial, professional and technical jobs have doubled to 44% of the UK workforce, (BBC News, 2012).

In general, many jobs done by self-taught or unskilled personnel are now so complex that certificates and formally proven skills are necessary.

## 4.4

### Rise of itinerant workers

The future types of organisation described in Chapter 3 are driving moves away from permanent employment. According to the CIPD, the share of self-employment remained stable at 7% from the Second World War to the late-1970s, and has risen steadily since then, reaching 14.2% by 2011. This is partially driven by economic circumstances – as self-employment tends to rise in recessions – but does not account for the whole of the rise.

For some – as described by Miller and Miller in their *Harvard Business Review* article *The Rise of the Supertemp* – this is an active choice for experienced executives seeking a more flexible worklife. Whereas executives have traditionally been employed in permanent contracts, Supertemps are becoming a feature of contemporary business. Even the best executive and professional jobs may become itinerant as highly sought-after talent seeks more flexibility, and firms become more able to meet specific demands in flexible ways.

- For those forced out of permanent employment by the current economic climate – perhaps lower-skilled and with the choice of only temporary work or no work – this often means lower pay, enforced part-time working and less job security. The different experiences of itinerant workers may also depend on their relative position in the job market.
- Lars Kolind believes that rising knowledge-intensity means work will increasingly be provided by multiple employers who share resource and constantly change tasks. Increased interaction with other domains of knowledge will lead to knowledge workers being both specialist and generalist at the same time.

However, this is not widely happening. Many survey respondents have seen little movement in this direction, and some are reducing their reliance on temporary labour – only 18% agreed that they were likely to employ many more subcontractors, freelancers and itinerant workers over the next ten years. Where more prevalent, this appears to be where there is rapid change, or in non-core functions.

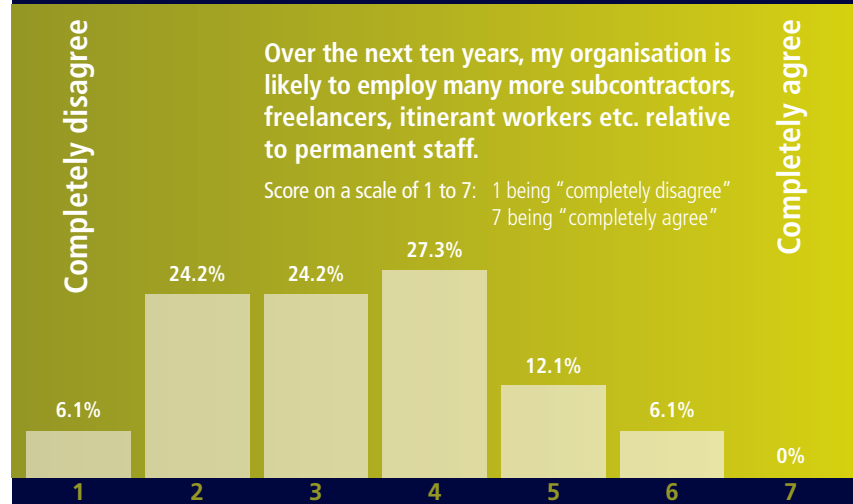
Telefonica is a typical example – a more flexible workforce in new development areas where specialist skills are needed on short-term assignments, and in support functions, and more permanent resource in core business areas where continuity is required.



#### Diversity trends

- Gender diversity has been a focus for organisations, given the proliferation of women in the workplace over the last three decades – and the fact that they still struggle to achieve equal representation at senior levels.
- This trend is likely to continue, and pressure to improve numbers of senior women is growing.
- Some countries, such as France and Norway, have adopted quotas for female membership of boards.
- Emerging markets seem to be leading in promoting women. One-third of Chinese senior managers are female compared with a quarter in the US and less than a fifth in the UK.
- Although most countries are reluctant to legislate, there is increasing demand for more women at the top, particularly as evidence suggests there are business benefits.
- Of the organisations we surveyed, many have targets – but not quotas – for women at different levels.

#### Online survey - sub-contractors



## 4.5

### Diversity and the future of work

Diversity is too complex a subject to be examined in depth here – but see CRF's 2011 report, *Diversity and Business Performance*. However, a key work trend is increasing workforce diversity. See the column.

Flexible working has been particularly helpful for women and, as it becomes a widely-accepted practice, women may well achieve a better worklife balance. Also, some organisations are making explicit the link between wanting more women at senior levels and flexible working policies – an objective of Unilever's 'agile working' agenda is to help embed its gender balance.

Both writers and our interviewees expect organisations to become more diverse in all areas – not just gender diversity – and to include ethnicity, and less explicit factors such as diversity of thought and the different attitudes of generations. Many cite Scott Page of the University of Michigan, who has produced evidence showing that diverse groups perform better in tasks such as problem-solving, and are more creative and innovative.

## 4.6

### Business benefits

Organisations are unlikely to make significant investments in technology and new working practices unless there is a perceived business benefit. Our research highlighted several, both tangible and intangible.

- Reduction in building costs. IBM estimate that 70% of their 400,000 employees work from home at least once a week, and operating a flexible, mobile workforce saves more than \$100m per annum on office space. Vodafone UK have reduced building costs by 30%.
- Increased efficiency. Ceridian has found that smart resource scheduling technology for moving people between front and back office roles in response to demand, has allowed retail clients to save 5%-8% of labour costs.
- Improvements in outputs when people have autonomy over how, where and when they work. As noted in Chapter 3, Arise, the virtual outsourcing provider, achieves significantly higher productivity levels from its self-employed, home-based workforce than a typical call centre.
- Reduced cycle times for new product development – Vodafone, for example, reduced the time to develop new price plans from 90 days to four.
- Lower turnover and absenteeism, and higher job satisfaction. Following implementation of a distributed call centre where all 1,000 agents worked from home, airline jetBlue reduced staff turnover to only 3.5% annually.

## 4.7

### Overview

The future of work will be as much a story about human activity as one of technology. Therefore we have highlighted the practical applications of technology rather than technology in its own right.

- The future of work promises computation, communication, distributed monitoring of activities and a range of other features at any time and any point.
- The combination of highly intelligent, embedded and hand-held computational devices connected to cloud servers for both automatic remote storage and highly advanced processing, can already provide services far more advanced than a couple of years ago.
- The trend of networking technology to support highly-distributed and decentralised work is an everyday practice for many workers, and looks set to accelerate.

However, the role of technological development in the future of work is often over-simplified. The more we communicate anytime and anywhere, and the less that distance matters, the more important becomes where you are, who you choose to speak with and the context within which you do so.

## PARADOXES FROM THE FUTURE OF WORK

Topics covered		Introduction
<b>5.1</b> The key paradoxes	36	This chapter describes the paradoxes that organisations will have to resolve as they plan their response to future work challenges – at organisation, people and technology levels. Practical experiences are also provided.
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“The essence of organisational paradox is the contradictory situation of opposite solutions both making sense without any straightforward best solutions.” **Sorensen, 2011.**

## 5.1

### The key paradoxes

Much of the writing on the future of work presents an unwavering, optimistic view of the future offering interesting possibilities, in spite of warnings about possible negatives. However, the potential contradictions are cause for reflection, requiring conclusions specific to local contexts. Bob Johansen of the Institute for the Future believes future leaders should be able to assess the dilemmas put forward by the VUCA environment to see opportunities from negatives. “Dilemma flipping is re-imagining an unsolvable challenge as an opportunity,” he says.

We acknowledge that the truth is plural and will need to be discovered by companies and individuals in their own situations when crafting corporate strategy. Rather than attempting to decode the future precisely, we assume businesses will have to continuously balance contradicting demands. An executive today must be able to intelligently navigate such contradictions.

The paradoxes of this chapter are in three major sections.

- Those faced by organisations.
- Dilemmas resulting from new working practices.
- Technological paradoxes.

#### Key Paradoxes in the Future of Work

##### Organisation Paradoxes

Innovation	vs	Optimising business as usual
Flexibility	vs	Governance

##### People Paradoxes

Anytime/anywhere	vs	Establishing boundaries
Manage process	vs	Manage outcome
Professionalisation of work	vs	Amateurisation of professions

##### Technology Paradoxes

Warm customer relationships through cold technology for next to nothing	vs	Cold customer relationships through people
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## 5.2



### Organisation paradoxes – ambidexterity

#### Innovation versus optimising business as usual

Strategic choices typically range between exploiting operational excellence for short-term gains and/or exploring longer-term opportunities. Theory suggests that these choices require radically different operational, tactical and strategic activities.

- Operational excellence requires a stable, gradually evolving strategy, tight controls and a clear command structure and hierarchy. This is still the prevailing organisation model.
- Conversely, exploring emerging opportunities tends to require radical strategy, and a structure to develop new products and services – usually through flexible, networked project structures.

The structures, decision-making processes, leadership styles and skill sets required for success in each of these types of organisation are very different – even contradictory.

Concurrent Survival Patterns		
	Improvement	Innovation
Strategic (environment)	Stable	Dynamic
Tactical (organisation)	Supportive	Flexible
Operational (behaviour)	Deliver	Network
<div> <div>  <p>Focus on operational improvements through stabilising support system based on carefully optimising towards stable needs</p> </div> <div>  <p>Focus on radical innovations through flexible network able to reconfigure organisation when emerging opportunities occur</p> </div> </div>		

Source: Holmberg & Mathiassen, 2001; O'Riley & Tushman, 2004; Birkinshaw & Gibson 2004

Contextual forces increasingly demand that organisations become ambidextrous. An 'ambidextrous organisation' (coined by Duncan in 1976) typically resolves the paradox of simultaneously optimising operational agility by deploying existing capabilities while, at the same time, exploiting other opportunities. The column has an expert view.

Given the difficulties in managing this paradox, what can organisations do to become ambidextrous? Literature, and our experts, identified two main approaches which we call structural ambidexterity and contextual ambidexterity, defined by Gibson and Birkinshaw (2004) – as the diagram below shows.

### Two forms of ambidexterity

**Structural ambidexterity.** This has separate units for new and existing business, with different processes, structures and cultures and tight links across the senior executive level. An organisation can thus balance conflicting concerns – that staff in different units would operate in different ways, for example.

**Contextual ambidexterity.** Here, front-line staff divide their time between optimisation and innovation, with top management providing the appropriate organisation context.

### Big I – and small i

- Professor George Day of Wharton, University of Pennsylvania, differentiates BIG I innovations – exploring 'blue ocean' markets with new business models, products and services – and small i innovations. These are incremental improvements and moving into adjacent markets.
- His research reveals that companies often focus on small i at the expense of BIG I – thinking that BIG I is high-risk and the returns too far in the future to satisfy quarterly, earnings-driven financial markets.
- The reality is that the consequences of this risk aversion are felt today, as equity markets take into account a lack of investment in how they value companies – and, in the long term, face a high risk of being overtaken by more innovative, agile competitors.

### Structural Ambidexterity vs. Contextual Ambidexterity

The traditional view of organisational ambidexterity revolves around a structural separation of initiatives and activities. The notion of contextual ambidexterity, which manifests on an individual level, represents a complementary process.

	Structural Ambidexterity	Contextual Ambidexterity
<b>How is ambidexterity achieved?</b>	Alignment-focused and adaptability-focused activities are done in separate units or teams	Individual employees divide their time between alignment-focused and adaptability-focused activities
<b>Where are decisions made about the split between alignment and adaptability?</b>	At the top of the organisation	On the front-line - by salespeople, plant supervisors, office workers
<b>Role of top management</b>	To define the structure, to make trade-offs between alignment and adaptability	To develop the organisational context in which individuals act
<b>Nature of roles</b>	Relatively clearly defined	Relatively flexible
<b>Skills of employees</b>	More specialists	More generalists
<b>Commercial Model</b>	P&L; annual budgets and regular reporting cycles	Venture capital; good ideas given space and resources to develop; acceptance some will fail

Source: Birkinshaw and Gibson, Building Ambidexterity into an Organization, MIT Sloan Management Review, Summer 2004.

### Structural ambidexterity

"When it came to launching breakthrough products or services, ambidextrous organisations were significantly more successful than [other] structures," state O'Reilly and Tushman in The Ambidextrous Organization, *Harvard Business Review*, (April 2004).

Their study of the organisation models behind 35 attempts at breakthrough innovations across 15 business units in nine different industries, revealed that only one successfully balanced radical innovation with operational excellence – structural ambidexterity. They cite three reasons.

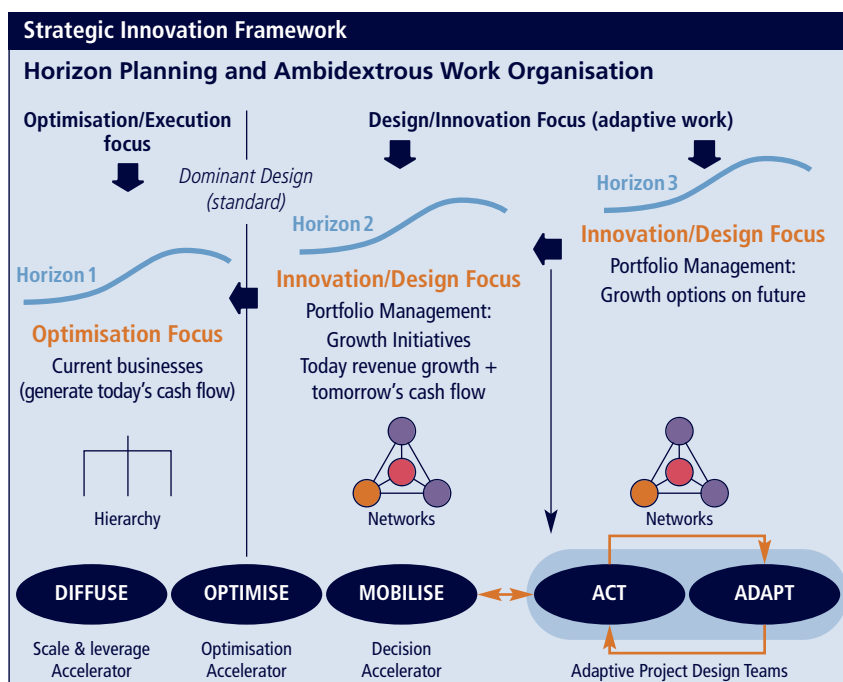
- Structure allows cross-fertilisation among units, while avoiding cross-contamination.
- Tight management co-ordination allows resources to be shared, while being separate ensures new units are not overwhelmed by 'business as usual'.
- Existing business units are not distracted, and focus on optimising existing business.

### Three horizons

This finding is confirmed by Stu Winby, Senior Partner at Innovation Point in Silicon Valley, who says that an adaptive model, based on the principles of structural ambidexterity, is the best approach. Both optimisation and adaptiveness are necessary for an organisation to survive commercially. However, his experience suggests that the adaptive approach will be strangled by a parent company structure unless the right management techniques are in place for the two models to succeed in the same organisation.

The solution to this paradox, believes Winby, is to create the conditions for both models to survive. One way is to clearly define and segregate three different phases of development, which he describes as 'horizons'. See the diagram below. The skills and capabilities required at each horizon are different and, usually, the people who are best equipped to succeed at Horizons 2 and 3 are not suitable to take an idea to scale at Horizon 1.

The distinctive feature is that adaptive work in Horizons 2 and 3 is not limited to R&D but becomes a model for continuous innovation among a company's knowledge workers.



Source: Stu Winby, 2012

“It is evident that the old boss who analyses, plans, controls, rewards and punishes, is woefully incapable in [a contextually ambidextrous], purpose-driven organisation.” **Lars Kolind.**

#### IBM's turnaround strategy

- Develop new management processes to nurture emerging business opportunities.
- A new structure divided responsibility for a venture's success between the corporate strategy office and a 'host' division, with a senior executive from the latter assigned to the new business.
- Initial funding was provided from a corporate budget, with the host increasingly taking on financial responsibility as the venture matured.
- Group Finance also made sure the host divisions were investing in their ventures and not starving them of funds to achieve short-term financial targets.
- Top talent was encouraged to take on roles in new ventures by giving them visibility and access to the senior leadership team.
- In the first five years, of 25 new business launches, 22 were successful and delivered \$15bn of annual revenues.

Source: Gary Hamel, *The Future of Management* (2007).

Similarly, Peter Cochrane's experience, as CTO at BT, showed that the best way to deal with this paradox is to create separate divisions or new organisations, on a different site, to deal with new products and technologies, thus keeping them away from the traditional, which can easily stifle nascent businesses.

#### *Structural ambidexterity in practice*

IBM's turnaround in the early 2000s is a good example. New business launches were failing because they were saddled with the same earning expectations as IBM's established legacy businesses. When these short-term targets were not met, budgets were withdrawn. Conversely, new ventures did not attract the company's best talent – due to their high failure rate, people preferred the legacy business rather than taking a chance on a new venture. This dilemma was resolved by Lou Gerstner, IBM's CEO at the time. See the column.

Telefonica Digital is a further example from our interviews, which set up a new division to exploit digital opportunities and drive future growth.

- Louise Harrison, HR Director, Future Skills, described how it used the best of the parent organisation while maintaining enough flexibility to develop new businesses without being stifled by the typical corporate processes of a large multinational.
- The division has a distinct culture, reinforced by separate policies in areas such as reward, KPI setting and job grades.
- The advantages of corporate scale are exploited in other areas such as corporate procurement, strategy and planning.

#### Contextual ambidexterity

The research of Birkinshaw and Gibson referred to above, based on studying 41 business units in ten multinational companies, suggests that contextual ambidexterity may be the more effective strategy – because exploration and exploitation-focused activities should not always be separated, and because it is more effective to devolve this paradox to front-line employees who are closest to customers.

- Structural ambidexterity relies on specialists, with the trade-off between innovation and optimisation defined by top-management. Contextual ambidexterity relies on top-management creating a context in which generalists act and adapt quickly to changing opportunities – by continuously assessing what the right balance should be between the contradicting forces.
- However, Birkinshaw and Gibson do not have empirical evidence that contextual ambidexterity produces superior business results – rather that, “the two approaches are best viewed as complementary.”

Lars Kolind argues that this approach can work for organisations of up to 2,000 people but is more challenging for anything above. He says the following interventions can help implementation.



- Developing a culture where individuals take responsibility for completing tasks they are committed to.
- Encouraging an open and honest environment where individuals discuss in advance with their manager if they are unable to complete a task, so that a solution can be negotiated.
- Basing pay and performance decisions on outputs rather than inputs, and including feedback from peers.

Google, for instance, allows its engineering staff to spend 20% of their time on self-directed non-core projects, from which many new services have emerged. See the column for an academic example.

### 5.3

#### Organisation paradoxes – commentary

Evidence suggests that structural ambidexterity is a proven means of managing the paradox of innovation versus optimising business as usual. However, both forms of ambidexterity are not mutually exclusive, and the best results are likely to be achieved by a combination of the two.

- The future organisation will increasingly rely on individual discretion as innovation becomes more important in work. Radical changes and having to deal with organisation paradoxes are unlikely to be successful without an overhaul of leadership practices.
- That could be in managing different divisions in different ways or a root-and-branch replacement of command-and-control leadership with decentralised decision-making. Chapter 6 considers how leadership styles will need to adapt to the future of work.

Different industries are likely to place different emphasis on the conflicting requirements for stability and flexibility.

- In a utility company, for example, significant opportunities for discontinuous innovation may not appear very often, so to stay competitive the focus will be on incremental operational improvements.
- In highly-regulated industries such as financial services, the scope for innovation will also be limited because of regulatory requirements.
- For high-tech companies, the most probable challenges are those around future opportunities while also ensuring the organisation is fine-tuned to cope with radical change.

#### Academic contextual ambidexterity

- In essence, academics are custodians of their own careers.
- They define their research with close attention to balancing incremental innovations, which may be easier to publish, and innovations fundamentally challenging existing beliefs.
- Too much focus on incremental innovation may yield many publications, but perhaps also less glory and fame – whereas groundbreaking innovations may be highly risky for career prospects.
- However, it is traditionally accepted that it is down to individuals to manage this tension, as they will have to face the consequences of their choice.
- Darwin famously hesitated for 20 years before publishing *The Origin of Species*, as he realised the message that man descended from ape would not be well-received.

**“It’s a different way of thinking about work. I’ve stopped talking about work/life balance – for me it’s about integration. It’s how people now live their lives.” Maxine Dolan, Group Leadership Development Director, Tesco.**

#### Managing boundaries and workloads

Here are examples of how companies are dealing with these issues.

- Banning e-mail at certain times, as done by eBay at weekends, or as Volkswagen recently agreed with unions in Germany – or migrating internal e-mail to other technologies, as done at Atos, described in the next column.
- However, it is difficult to ‘un-invent’ a technology with such a useful purpose.
- Training and educating employees to manage their workload to improve creativity and effectiveness.
- The Energy Project, for example, works with eBay and Google, among others, to help staff focus, maintain motivation and avoid burnout.
- Film-rental company, Netflix, allows staff to take as much holiday as they like – hoping to create an employment culture of ‘freedom and responsibility’ – and focuses on outputs rather than time spent at work.

However, many interviewees expressed concern about such policies, suggesting that, paradoxically, people will take less time off.

#### Flexibility versus governance

Corporate scandals of recent years, such as Barclays’ manipulation of LIBOR and the collapses of Enron and Arthur Andersen, show how the actions of individuals or small groups can bring significant risks to the entire firm. Where there are no asymmetric risks associated with delegation, light-touch management and governance can ensure that most decisions are sound. However, in fast-moving organisations where decisions of small groups of individuals can have serious consequences, the requirements of flexibility and governance will have to be finely balanced.

If, as we anticipate, the future of work means more front-line devolution, this will also lead to continually balancing decentralisation with sound governance of delegated decisions to manage effectively any asymmetric risks.

Paul Lomas, HR Director at Worldpay, raised the dilemmas faced by hi-tech businesses which are also subject to financial regulation. Regulatory concerns about operational security can limit the extent to which companies implement many of the approaches described here, including flexible working, decentralisation and outsourcing.

## 5.4

### People paradoxes

#### Anytime/anywhere versus establishing boundaries

While the flexibility of workplace virtualisation can fuel creativity and innovation, paradoxically it also creates the need for establishing new boundaries. Smartphones, tablets, and flexible working enable people to function where they find it convenient. They are, however, more fixed than ever because of the electronic tags used to make them instantly reachable. Although new communication technologies have created highly beneficial connectivity, they also lead to much unnecessary work.

- This lack of boundaries is a key challenge in the future of work. A Future Foundation study of 3,500 white-collar workers in UK, US, Japan, France and Germany, found that 43% claim their remote working results in longer hours, and 40% foresee the work/life-home/life boundary blurring even further. See the column.
- The report further states: ‘We also anticipate the introduction of more personalised, contextualised prioritisation tools to help staff manage their workloads more effectively.’ Establishing suitable boundaries will be critical.
- Always-on working, plus competition for jobs or promotion, can create a dependency relationship making it difficult for workers to switch off. In some cases, it produces addictive behaviour, viz the ‘Crackberry’. Constant working can lead to burn-out, which imposes a significant employer challenge.

Many interviewees highlighted this as a key issue. For example, Louise Harrison of Telefonica finds that time boundaries around work have shifted noticeably, and people increasingly work weekends and evenings. She says the responsibility lies with individuals to set their own boundaries, as they find it hard to say no. It also appears that decisions regarding boundaries are delegated to individuals and groups, rather than companies themselves setting standards.

#### What HR can do

As the benefits of flexible working and mobile technology far outweigh the potential downsides, they will still feature in the future of work, becoming more tightly integrated into working practices. However, these steps can help offset some of the risks associated with technology over-use.

- HR should monitor the effects on the organisation's welfare and challenge where necessary. Staff who suffer stress through overwork and a failure to maintain boundaries cannot perform at optimum levels, and this may become a source of future litigation.
- A key factor too is whether work is allocated correctly, as unclear responsibilities can lead staff to feel they cannot switch off.
- Senior teams might consider having a protocol – rather than rigid rules – and communicate this widely. It is also critical that leaders role-model expected behaviours to avoid any measures implemented being ignored.
- Cutting down on e-mail and using alternative communication mechanisms – including social media, instant messaging and document sharing – and educating people in the method best suited to different situations. See the Atos example in the column.
- Whatever an organisation provides, managing potential overload will be an individual's own responsibility, which means navigating the available media sources – and knowing when and how to say no.

#### Apps creating boundaries

The same devices that enable flexible working can also become stable anchors. For example, personal computer utilities can support boundary management by reducing distractions and helping individuals focus on a particular activity. These include:

- WriteRoom, which helps users concentrate on producing text and nothing else.
- RescueTime.com, which monitors all user activities and sends a weekly e-mail with a productivity score based on their classification.
- MacFreedom.com allows internet access to be disabled for an allotted amount of time.

#### Banning internal e-mail at Atos

- When Thierry Breton took over as CEO of consultancy firm, Atos, he decided employees spent too much time on internal e-mails.
- They received an average of over 100 a day – of which only 15% were useful – and spent an estimated 15-20 hours each week checking and answering them.
- He replaced them with social networking and other means of communication, resulting in a 20% drop in internal e-mails.

Breton predicts: "Instead of internal e-mail, we will have fantastic new tools – a cloud computing environment, social networks, instant messaging, micro-blogging, document sharing and a knowledge community. These offer a much better approach for an IT company."

“Organisations today are still driven by Taylorism and scientific management, but this model does not fit the new world.” **Stephen Brooks, Partner, PA Consulting.**

#### RWorks' solutions

- Streamlining and automation are not only relevant for routine work. Solutions are emerging which allow more complex knowledge-based work to be managed remotely using software tools.
- One example is RWorks, who have developed software which allows managers to track progress and productivity by individuals and across teams and locations, including remote workers and freelancers.
- It measures the time spent on activities, percentage of progress, and can estimate when tasks will be completed.
- It also allows managers to compare productivity levels of different individuals and teams and identify high performers.
- For companies inexperienced in, or sceptical about, remote working, these services can give a degree of confidence in allowing people to work flexibly.

#### Manage process versus manage outcome

Some types of work – where outcomes can be objectively measured, such as sales representatives, for example – have traditionally been managed by outputs. However, although organisations will claim to measure performance by results, the reality is that most manage performance through direct observation of inputs, how work is done and results achieved. Time spent at work has some bearing on performance ratings, and often those regarded as heroes are the ones who pull out all the stops and work hardest.

However, flexible and mobile working makes direct observation difficult, resulting in the ability to measure outputs becoming critical. As Maitland and Thomson observe in *Future Work*, such working requires trust between employee and manager. They advocate re-thinking performance measurement, moving away from presenteeism and measuring inputs, to assessing purely on what is achieved.

This has the potential to revolutionise how work is done, as it allows people the flexibility to choose where, when and how they work, providing they achieve the expected results. Assessing outcomes can also help reduce the complexity of managing flexible workers – the precise arrangement of work is left to the discretion of individuals.

Many interviewees spoke of ‘the death of Taylorism’ or scientific management, particularly as it applies to knowledge work. But, as Stephen Brooks, Partner at PA Consulting, pointed out, companies are not clear about what should replace it.

- Computerisation and ‘big data’ allow outputs to be measured more accurately and previously unseen connections made. Knowledge work can be measured while work activity observation can be automated and aggregated – thus allowing assessments of the relative impact of an individual’s activities.
- Herein lies a paradox. Flexible and virtual working is shifting towards management by outcome, with less concern for how and when work gets done. But, the technology to observe work activities in real time is becoming more sophisticated, widely available and affordable.

#### Professionalisation of work versus amateurisation of professions

The last decade has seen an intense professionalisation in many aspects of working life. The traditional professions of lawyers and doctors have been extended with new ones, each with their own qualifications, professional bodies and standards. In a knowledge-intensive and connected business world, deep specialist skills are highly sought after.

#### Expert and practitioner views

- Gratton (2011) suggests that “the age of the generalist is over.” envisaging instead a world where people need ‘serial mastery’ to create value – that is, developing skills in a chosen field but, over time, shifting into different but related areas of work.

“There are now many more ways of making a living and the boundaries around organisations are more porous.” **Bob Johansen, Institute for the Future.**

- Even relatively low-level jobs have become more knowledge-based – delivery drivers now map out their own routes using both knowledge and technology, for example.
- We think more professionalisation is an important part of codifying and certifying essential individual technical capabilities, which also acts as a counterbalance to increasingly fluid and flexible labour markets.
- In many areas, professionals have to apply their skills across different disciplines. At Random House, for example, as books are published in different formats and consumers want to access them in different ways – including apps and social media – the roles of editing, publishing and marketing are gradually merging.
- Similarly, Peter Cochrane, formerly CTO at BT, sees the technical expert with a ‘soda straw’ view of the world being consigned to history. He thinks the future lies with ‘new renaissance’ workers who span different functions as they deliver projects – and tomorrow’s worker will need to be continuously educated as they move rapidly between different project and skill areas.

Organisations often require increasingly specialist, though not necessarily full-time skills which they may not want on a permanent basis. Intercontinental Hotels Group is an example. Faye Frater, VP Organisation Development, described how, within her OD function, which has evolved over a couple of years, their philosophy is to be a lean central team of two-to-three roles – and to bridge the gap, bring in specialist consultants who are experts in their field and generally have the advantage of significantly lower daily rates than big firm management consultants.

Organisations in future will have ever greater scope to mix and match resourcing strategies and selection of expertise for their specific needs and organisation structure. Locating the right mix of permanent staff, itinerant workers, reliance on commoditised crowd-sourcing and innovation competitions, will be essential for them.

## 5.5

### Technology paradoxes

Our assessment of the future of work is based on these assumptions.

- Work will become more complex, and that which is not will increasingly be done by customers through self-service.
- Organisations will face parallel challenges of a ‘race to the bottom’ – delivering services at ever lower cost – and a ‘race to the top’, delivering better, more individualised products and services to a global audience.
- Technology will become more ‘humanised’ and ‘socialised’, making it a more enjoyable experience for customers to engage with companies online.

#### Professional tools for amateurs

- Advanced technologies required to deliver products and services of a professional quality within a profession, have now placed professional means of production in the hands of amateurs.
- Using inexpensive software, music can be produced on a laptop, which may well be indistinguishable from an expensive recording studio production.
- Consumer cameras, and increasingly smart phones, allow anyone to take pictures of professional quality.
- The ‘prosumer’ is now armed with advanced means of production which competes directly with professionals, using internet-based platforms to collaborate and reach a market.
- Another example is the phenomenon of ‘unsourcing’ where companies set up online communities to deal with issues such as customer support.
- Problems with software, for example, can be resolved by connecting with other users who have experienced similar problems, via discussion forums or social networking. Companies supplying the software save on support costs.

“The consumer is often a better supervisor or inspector of work than someone whose job it is to oversee, as they are more motivated by the outcome.” **GBS Bindra, Global Innovation Director and Strategy Leader, Logica.**

#### Using data analytics

- Bjarne Kaavé of Tryg, a Danish insurance company, described how it uses data analytics to codify and analyse customers' needs, correlating factors such as address and lifestyle to identify trends.
- For example, people who live in affluent parts of a city tend to have burglar alarms, while those in rural areas rely on their cars more than city dwellers – and, therefore, have more need of a replacement vehicle when something goes wrong.
- This information could be reduced to 14 questions and used to determine, via self-service, appropriate insurance products.
- The company finds that such automatically-generated offerings more closely match customers' needs than those provided by typical sales representatives.
- According to Kaavé: “It is similar to supermarkets. The shop has decided what goods are available, and the customer then selects which ones to put into the basket.”

We would describe it as, “delivering warm customer relationships through cold technology for next to nothing,” and see this directly in opposition to the current trend of placing humans at the front-line of customer contact, yet engaging in highly-codified and scripted interactions.

#### Customer self-service

- Online car rental company, Zipcar, was founded on the idea that car rental through internet and mobile IT can be transformed into a club where members do most of the work and pay for doing it. Customers book cars online or via a mobile application, pick up from, and return to, their nearest location – Zipcar does not have depots like most car rental companies – and deliver the car clean and full of fuel after use, ready for the next customer.
- Easy access to the car through a mobile phone or a member card without having to fill in forms aligns the interests of Zipcar by saving costs and the customer's desire for transparent, quick access to a car parked just around the corner.
- Some local authorities encourage the public to text a smartphone picture of services – such as street lamps, for example – that are not working. Responsibility for supervisory work is thus gradually being passed from the local authority to the public, allowing its staff to be used more productively.
  - IKEA have successfully encouraged customers to take over one stage of the manufacturing process – assembly. They can also check current stock levels in their local store and receive four-day stock estimates in order to plan their trip.

#### Examples of individualisation at low cost

Highly labour-intensive services tend to be expensive. However, the costs of personalisation can be greatly reduced if some or all of the service relationships can be streamlined and automated, so the customer can take responsibility for defining one based on their needs. Economies of scale in services are much easier to achieve using self-service and automation technology than for manufactured goods. Examples are below and in the column.

“Much of the administration that people do today will become invisible – behind the mobile phone and within robotics.” **Mike Jackson, Chairman, Shaping Tomorrow.**

- The rise of products adapted to lifestyle – for example, pay-as-you-drive car insurance, using technology which tracks actual driving behaviour to assess risk.
- Arise, the virtual business process outsourcer described in Chapter 3, has developed a smartphone app with a roadside assistance provider which transmits personal data, including location, to a call centre. When a stranded driver calls for assistance, an agent already knows who and where they are. Customers are so pleased with this service that the company has launched a successful referral scheme – and it is anticipated that this technology will become embedded in cars in future.
- Emergence of what the Future Foundation calls ‘lawnmower brands’ – services which, given an individual’s unique requirements, identify a highly customised, automated and low cost solution from all the available options.
- Gene decoding technology is gradually becoming commoditised, meaning that personal healthcare, based on an individual’s genome, will soon become affordable.
- Globalisation of design and manufacturing processes has allowed increased individualisation of products at low cost. This is likely to accelerate with the advent of 3D printing, potentially allowing consumers to print their own customised products.

### Commentary

As user interaction with technology becomes more sophisticated, the experience will become more appealing – witness the change from text-based to icon-based interaction on the personal computer, and from keyboard to touch-screen on the mobile phone. The rise of voice and gesture-based interaction will make a difference in the future, although still in its infancy today.

The Siri digital assistant on the iPhone combines advanced speech recognition and complex cloud-based query resolution – but is still some way off the mark. We can be confident that future services will be advanced, and interaction with technology will feel ever more ‘human’, appealing to broader audiences than tech-savvy early adopters. Customers will increasingly be socialised to accept that truly excellent service can be achieved in settings other than face-to-face.

This concept of ‘delivering warm customer relationships through cold technology for next to nothing’ has the following implications for organisations.

- Companies need to change how they develop products and services and start with the end user. “Instead of, ‘What do we have and how can we sell it?’, good business practices start by asking ‘Who are you?’, ‘What do you need?’ and ‘How can we help?’ This inverted thinking makes it possible to identify the assets that represent real value for each individual. Cash flow and profitability are derived from those assets.” (Zuboff, 2010).

### Individualisation practices

- Tesco has historically used data generated by its Clubcard to determine in-store ranges and offers, rather than tailoring offers to individuals. However, it is now looking at customising offers to the buying patterns of consumers, which it can track using sophisticated data analytics.
- The ‘retailisation’ of high-end services is already a fact of life for companies like Apple, Google and Amazon who have delivered highly-personalised services at low cost to a global consumer base.
- When purchasing an Amazon Kindle or an Apple iPad, the customer is implicitly signing a contract that they will be entirely responsible for the management of the device, using the appropriate web and mobile portals to purchase books, music, apps, etc.
- Although iPads and Kindles are in many ways identical, the user customises the product to suit their own needs and interests, making each one unique.
- Bank customers assume responsibility for managing their accounts and making payments, instead of using bank employees or call centres.



### Individualised products

- Automated self-service is not restricted to services and increasingly applies to physical products.
- For example, the award-winning, silicone-based material, Sugru, allows individuals to 'hack' their physical world – for example, creating their own handles for garden tools.
- The product has been successfully marketed via social media, mostly by customers, at zero-budget.
- Innovations in highly-automated, micro-manufacturing and 3D-printing are set to strengthen the process by which individuals can design their own products and have them printed.
- Highly-automated production of small product batches may turn out to be the biggest disruption to manufacturing since Henry Ford's assembly line.

### Vodafone – future work drivers

- The need to show leadership to customers by adopting technology and practices internally that were part of Vodafone's customer proposition.
- Responding to customers' expectations of 24/7 responsiveness.
- Speed up time-to-market and rationalise decision-making processes.
- The ongoing war for talent and the need to attract new generations of high-potentials.
- Reduce costs.

- There will be a competitive premium on delivering highly-personalised, affordable services which are useful but which also engender emotional attachment. A factor in the success of the iPhone is its ease of use and novelty. Companies able to exploit this emotional connection with technology will be at an advantage.
- Organisations will become more like networks – or loose coalitions of service providers with the components to deliver their vision.
- Customer demand for personalisation will require greater involvement in service delivery by front-line staff, who adapt offerings to meet emerging customer needs.
- Successful organisations in the future are likely to be those that can reinvent themselves through innovation and large-scale marketing power – using data analytics to understand customer needs, and the internet/social media to reach a large audiences at low cost.
- Organisations delivering services will shift to continuous service process innovation, and will need the specialist skills to do so.
- With increased self-service of basic services, when customers contact a company through a call centre or in person, the nature of the issue will be complex. This has implications for the calibre and training of employees who handle such interactions, and how well they empathise with a customer's problem.

The great successes of the 20th century are largely the result of clever use of technology. The demands of the 21st century will take this to a new level, as organisations establish highly individualised and complex service relationships with customers, delivered remotely and cost-effectively with the look and feel of human interaction.

## 5.6

### Case study – Vodafone UK

#### New organisation culture based on future work principles

Vodafone UK exemplifies several trends in this report. When Guy Laurence took over as CEO in 2008, he instigated a number of changes, the drivers of which are in the column.

#### What Vodafone did – first stage

The first stage was to reconfigure the existing Newbury campus. Key features of the change are in the next column and below.

Flexible working is encouraged but driven primarily by the needs of the company and customers, rather than employees. Whether a request is granted depends on a decision hierarchy of customer needs, Vodafone needs, team needs and individual needs. Flexibility is viewed as a two-way process – but it has allowed Vodafone to achieve significant business benefits while at the same time keeping customers and employees happy.



“We sell this to our customers, so we have to live it ourselves.” **Vodafone UK.**

### Second stage – re-think

The second stage was to re-think how people are managed and decisions made. Collaboration is encouraged by management style and the physical environment:

- The organisation structure has become less silo and more horizontal, driven by the customer experience. For example, telesales is part of customer operations rather than sales, reflecting the organisation's customer service focus.
- Collaboration across functions at senior level has changed. Every quarter, the top 70 managers identify their five 'big ticket' objectives and negotiate them with each other and the CEO. They thus line up department objectives, with the resources being made available to deliver.

#### Measuring performance

Measurement is based on delivery rather than inputs. Compared to other organisations, there is less questioning of what people are doing when they are not physically present in the office – and an assumption that colleagues are working hard wherever they are. Management by output is based on trust, and people are largely self-regulating. Problems can usually be addressed by having a quiet word, while peer pressure has a big impact.

### Implementation

Senior leadership was essential in developing a vision for new ways of working and making sure it was followed through. Guy Laurence had a clear vision of what could be achieved, building on his previous experience of turning round the Netherlands business. He did not engage in focus groups or other classic large-scale change management activities. The rest of the UK board shared his underlying philosophy and principles, but the vision was driven from the top. As a result, implementation took only four months.

Two years on, David Fry, Head of UK Property, says that the new approach is still being adopted consistently. The business benefits so far include a higher degree of collaboration, faster decision-making and time-to-market, and a 30% reduction in building costs.

#### Vodafone – reconfiguring office accommodation

- No-one has their own desk. Each team has a home zone in one of the buildings on campus, but team members can sit where they like. Staff in support roles such as Finance often use the home zone of the team they support.
- No offices or partitions – therefore, no private space.
- Storage is limited to one drawer of a filing cabinet per person, to encourage paperless working.
- Currently there are eight desks for every ten people; this is being reduced to six or seven.
- Strict criteria for booking meeting rooms – minimum number of attendees, for example. If a meeting does not begin on time, the room is freed up for someone else.
- Meeting rooms have high-quality, video-conference facilities. Staff are encouraged to meet colleagues face-to-face at other locations first, but to use teleconference facilities for subsequent meetings. This has led to a significant reduction in travel costs.
- Different types of communal space with clearly-defined purposes – libraries for quiet work where fines are imposed for making calls; and lounges for informal brainstorming sessions, furnished to encourage creativity, are examples.

## PREPARING FOR THE FUTURE OF WORK

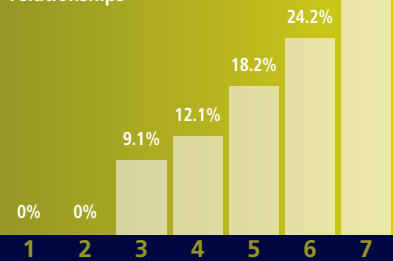
Topics covered		Introduction
<b>6.1</b> CRF survey findings	51	This chapter considers how organisations, and the HR function, need to act differently in the light of future developments. Future leadership and management skills are highlighted, as well as practical steps that can be taken to prepare for new ways of working. The chapter concludes by challenging the HR function to take the lead in inspiring the rest of the organisation to realise the possibilities of the future of work.
<b>6.2</b> Strategy and planning	51	
<b>6.3</b> Leadership, management and culture	53	
<b>6.4</b> Talent	57	
<b>6.5</b> Performance and reward	59	
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<b>6.7</b> The challenge for HR	61	

“While HR, technology and IT functions have joint responsibility for [future scanning], it is not done on a co-ordinated basis. This needs to change, as does the appreciation of how important it actually is.”  
**Respondent to CRF member survey.**

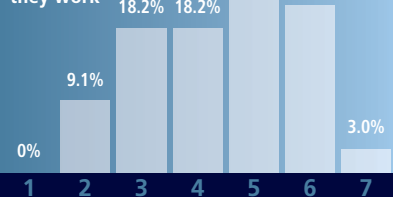
### Online survey - strategy and plans

When your organisation develops its strategy and plans, to what extent does it consider the following?

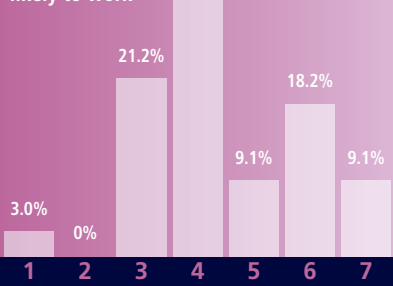
**1.**  
The future impact of new technologies on customer relationships



**2.**  
The future impact of new technologies on your staff and how they work



**3.**  
Where and how your people are likely to work



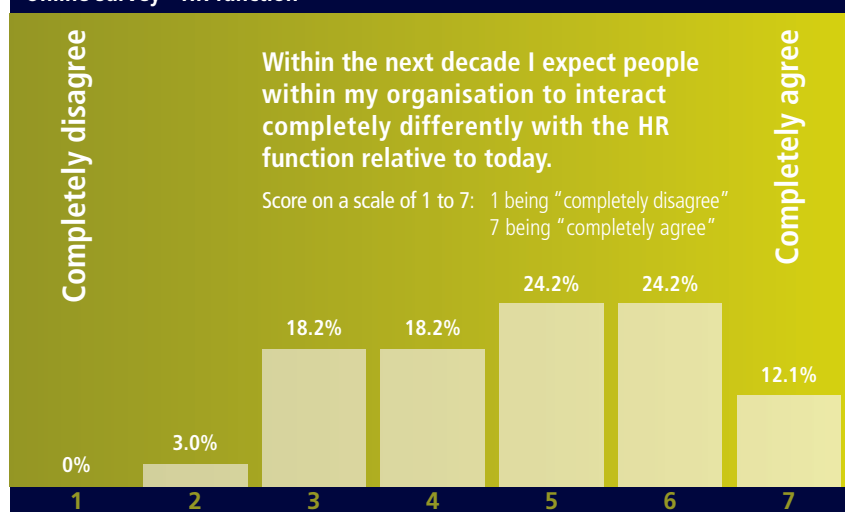
Score for charts above: 1 being “not at all”  
7 being “to a very large extent”

## 6.1

### CRF survey findings

The trends and themes throughout this report will have a significant impact on the HR function, which was recognised by survey participants – 61% agreed that people within their organisations will interact differently with the HR function in future. Organisations are also devoting more attention to the impact of new technologies on their customers, rather than their employees – 78% for customers compared with 54% for employees. Even fewer (37%) considered the impacts on where and how their people were likely to work.

### Online survey - HR function



## 6.2

### Strategy and planning

Crafting a response to future work challenges starts with strategy, and needs to be a fundamental part of the strategy development process. Organisations must also be able to adapt quickly to changing circumstances and emerging technologies. Many companies have failed to do so, relying on past successes – Kodak, Nokia and Sony are just three examples. This implies

- having effective future scanning mechanisms to provide insights for developing possible strategic responses
- building capability to generate many strategic options – Google estimates that 80% of its new products will ultimately fail
- allocating sufficient resources to move options quickly from idea to commercial reality
- realigning the structure to rationalise the paradox of optimising current businesses while growing future ones.

“Few companies have a disciplined process for generating hundreds of new strategic options, yet that’s what it takes to fuel renewal.” **Gary Hamel, 2007.**

Reinvention is not without risks, and it may appear to cannibalise existing markets. For example, O2 recently launched its TuMe application, which allows iPhone users to make voice calls and send texts and photos free. The company recognised that the world will move on anyway, and response was necessary in spite of the threats to its existing business.

### Future scanning

We were surprised that survey responses and research interviews indicated that many HR functions do not have a systematic approach for scanning future developments that will affect the workplace. Many said this is implicit in their strategic planning, but few could articulate how they identify and evaluate future trends and the implications for HR and people issues. Good examples are in the column.

Mike Jackson of Shaping Tomorrow, the business research and analysis service, says there is a limited number of organisations who do this well, thus missing an opportunity to be better prepared for future challenges.

### Emergent strategy

In fast-changing environments, strategic plans included in the strategy review process quickly become out-of-date. In CRF’s 2012 report, *Developing an Effective HR Strategy*, we discussed the concept of **emergent strategy**. Henry Mintzberg likens this to a potter at his wheel – although he may have a picture of the end product, it is constantly shaped until completed. There will still be a place for major strategic developments, but more flexibility is needed now in response to emerging opportunities.

In flat, decentralised organisations, front-line staff can identify emerging trends and feed them up the line. In his book, *Get There Early*, Bob Johansen talks about “strategic intent, with decentralised authority to execute and innovate within the boundaries of that intent.” It may be that strategy development, as defined by a senior management team, will need to be less prescriptive in future to allow for rapid change.

However, this presents a paradox for organisations. Given the need for BIG I innovations highlighted earlier, strategy formulation and communication may be more difficult for decentralised organisations. In spite of the technology available to facilitate communications, it can still be difficult to obtain buy-in from remote or outsourced management.

### Future scanning examples

- Tesco has relationships with a number of futurologists such as Institute for the Future, who they use to educate their leaders and provide input to planning processes.
- They combine this with extensive internal data sets and personal insights of HR leaders from different geographies and new business sectors, such as Tesco Bank.
- Intercontinental Hotels Group has identified future work trends as a key part of the three-year people strategy. Inputs included latest thinking from external consultants (ie small independents and large firms such as PA Consulting), as well as drawing trends/insights from their internal experts – HR Centres of Excellence.
- The strategy is refreshed annually. This recently resulted in seven key trends being highlighted, including the impact of new generations on the organisation, social media, and the possibilities offered by workforce analytics.

“When highly-motivated and eminently capable people share a common vision, they don’t need to be micro-managed.” **Gary Hamel, 2007.**

#### Conditions for future management

Gary Hamel thinks a shift from traditional management is only possible when four conditions are met.

- First-line employees are responsible for results.
- Team members have access to real-time performance data.
- Employees have decision authority over the key variables that influence performance outcomes.
- Tight coupling between results, compensation and recognition.

#### Conditions for management innovation

He contends that management innovation yields a competitive advantage when one or more of the following three conditions are met.

- The innovation is based on a novel management principle that challenges some long-standing orthodoxy.
- It is systemic, encompassing a range of processes and methods.
- It is part of an ongoing programme of intervention where progress compounds over time.

“Few companies possess a well-honed process for continuous management innovation,” he says in his book, *The Future of Management*.

## 6.3

### Leadership, management and culture

Our research suggests that organisations in future will become more flexible, decentralised, and managed to respond quickly to market changes. Working life will be very different as technology transforms how businesses operate. This will have profound implications for how firms are best led and managed. Here, we describe leading thinkers’ views on future leaders, and what some organisations are doing in response.

#### Gary Hamel

In *The Future of Management*, Hamel states that, compared to the momentous changes in technology and society, management practice has evolved slowly, and does not look radically different to 30 years ago. His view is that the management systems and processes prevalent today are incapable of dealing with the bold thinking and fresh approaches required by the dilemmas of the future of work.

Although modern management has undeniably made organisations disciplined and efficient, he questions whether this is at the price of constraining human imagination and initiative.

He notes that, “companies must become as strategically adaptable as they are operationally efficient” – particularly when compared with the flexible, networked organisations described earlier – and identifies three key management challenges in the new economy. See below and in the column.

- Dramatically accelerating the pace of strategic renewal.
- Making innovation everyone’s job, every day.
- Creating a highly engaging work environment that inspires employees to give of their best.

Hamel’s work is consistent with CRF’s view that HR should avoid tackling initiatives in clusters of one – instead, identifying the systemic causes of issues and making sure that all HR interventions are aligned to that agenda

#### Bob Johansen

Bob Johansen, of the Institute for the Future, identifies ten leadership skills which he considers to be critical for the future.

Critical leadership styles	
<b>Maker Instinct:</b>	ability to exploit your inner drive to build and grow things, as well as connect with others in the making. Leaders need this basic skill to make and remake organisations.
<b>Clarity:</b>	ability to see through messes and contradictions to a future that others cannot yet see. Leaders must be clear about what they are making but flexible about how it gets made.
<b>Dilemma Flipping:</b>	ability to turn dilemmas - which, unlike problems, cannot be solved - into advantages and opportunities.
<b>Immersive Learning Ability:</b>	ability to immerse yourself in unfamiliar environments, to learn from them in a first-person way
<b>Bio-Empathy:</b>	ability to see things from nature's point of view; to understand, respect and learn from nature's patterns.
<b>Constructive Depolarising:</b>	ability to calm tense situations where differences dominate and communication has broken down - and bring people from divergent cultures toward positive engagement.
<b>Quiet Transparency:</b>	ability to be open and authentic about what matters - without being overly self-promoting.
<b>Rapid Prototyping:</b>	ability to create quick early versions of innovations with the expectation that later successes will require early failures.
<b>Smart-Mob Organising:</b>	ability to create, engage with and nurture purposeful business or social change networks through intelligent use of electronic media.
<b>Commons Creating:</b>	ability to seed, nurture and grow shared assets that can benefit all players.

Source: Adapted from Bob Johansen, *Leaders Make the Future*, 2012

### George Day

Professor George Day of Wharton, University of Pennsylvania, contrasts the leadership styles required of growth leaders focused on BIG I innovation, and operational leaders.

Contrasting leadership styles	
Growth Leaders	Operational Leaders
Outside-in perspective	Inside-out perspective
Seek diverse views: network widely	Limit networks to familiar settings
Strategic foresight: probe for second-order effects	Predictable thinkers
Embrace uncertainty	Avoid uncertainty
Learn from experiments: fail fast and move on	See failure as an error
Enablers: create a culture of discovery	Controllers: permit little slack

Source: Professor George S Day, Presentation to CRF Conference, Athens 2012

### Alison Maitland and Peter Thomson

Maitland and Thomson identify a set of principles, skills and practices, which guide a transition to the style of management they see as necessary for future work. Underpinning their ethos is the importance of trust. "Assume people are responsible, give them the freedom to manage themselves, treat them like adults and watch them flourish," they say.

Principles, Skills and Practices for Transition to Future Management 'TRUST'		
Principles	Skills	Practices
1. Trust your people	<ul style="list-style-type: none"> <li>• Openness to change</li> <li>• Delegation</li> <li>• Relationship-building</li> <li>• Prioritising</li> <li>• Challenging status quo</li> </ul>	<ul style="list-style-type: none"> <li>• Give people freedom to work the way that suits them best</li> <li>• Don't insist that people work at specific times unless the job demands it</li> <li>• Allow people to use social media appropriately</li> <li>• Encourage people to work in teams, even if they do not sit together</li> <li>• Challenge the need for meetings</li> <li>• Don't keep work to yourself that can be done by others</li> </ul>
2. Reward output	<ul style="list-style-type: none"> <li>• Planning ahead</li> <li>• Clear objective-setting</li> <li>• Inspiring and motivating</li> <li>• Sensitivity to changing needs</li> <li>• Decisiveness and consistency</li> </ul>	<ul style="list-style-type: none"> <li>• Set clear outcomes and measure results</li> <li>• Hold regular reviews, particularly at first</li> <li>• Give plenty of feedback</li> <li>• Don't micro-manage, but check people are not working 24/7</li> <li>• Act quickly on poor performance and abuse of trust</li> <li>• Give people challenging work to develop them</li> </ul>
3. Understand the business case	<ul style="list-style-type: none"> <li>• Awareness of big trends</li> <li>• Stakeholder orientation</li> <li>• Technological competence</li> <li>• Influencing</li> <li>• Resilience</li> </ul>	<ul style="list-style-type: none"> <li>• Keep in touch with demographic, social, environmental and business trends</li> <li>• Identify potential for increasing productivity</li> <li>• Invest in technology to increase output</li> <li>• Monitor and measure the business impact</li> <li>• Build results into business plans</li> <li>• Share success across the business</li> </ul>
4. Start at the top	<ul style="list-style-type: none"> <li>• Willingness to change</li> <li>• Ability to 'let go'</li> <li>• Leadership by example</li> <li>• Tenacity</li> </ul>	<ul style="list-style-type: none"> <li>• Get senior management to support as a culture change programme</li> <li>• Set an example</li> <li>• Communicate the message at all levels</li> <li>• Use technology to control your own workload</li> <li>• See it through</li> </ul>
5. Treat people as individuals	<ul style="list-style-type: none"> <li>• Appreciation of difference</li> <li>• Responsiveness</li> <li>• Adaptability</li> <li>• Reliability</li> <li>• Team-building</li> </ul>	<ul style="list-style-type: none"> <li>• Understand what motivates individuals</li> <li>• Don't try to fit people into a fixed work pattern</li> <li>• Keep in touch with remote workers</li> <li>• Use judgment and don't just follow rules</li> <li>• Help people integrate work into the rest of their lives</li> <li>• Hold face-to-face meetings for virtual teams</li> </ul>

Source: Adapted from Maitland & Thomson, Future Work, 2011

### Case experiences

Some interviewed organisations have recognised the need for change in leadership culture, and are taking steps towards this. An example is Tesco, who now have a new leadership framework. Maxine Dolan, Group Leadership Development Director, described how the expectations of leaders today, and in the future, are different to ten years ago.

“Once an organisation has been listed and is at the whim of shareholders, there’s pressure for management to be conventional, which might be good for short-term shareholder returns, but not good in the long term.” **Peter Thomson, author and Director, Wisework.**

#### Changing expectations of Tesco leaders

##### Today

- Collaboration
- Empathy
- Innovation
- Agility and responsiveness
- More matrix/network driven

##### Ten Years Ago

- Analysis
- Decision-making
- Influencing
- Good management skills
- More top-down driven

Jamie Cooke, VP HR at Discovery Networks CEEMEA, emphasised the need to prepare the organisation, particularly functions such as Finance and Strategy, to respond quickly and support new ideas. He cited the example of a young employee in Russia who spotted an opportunity to develop the equivalent of Netflix in that country. By providing him with support in those areas where he was inexperienced, he was able to develop his idea into a viable business proposition.

It is, of course, easier to set up a company with an appropriate culture, leadership behaviours and styles than having to change those of a mature business, though there are exceptions. See the column.

#### Individual responsibility

A key theme from interviews was companies increasingly expecting employees to take on greater responsibility for results. This is partly driven by the economic climate where, over the last decade, de-layering has meant fewer supervisors and middle managers are available to take control – but it is also driven by delegation and flexible organisations identified in this research. As Hamel says, “Accountability ensures that autonomy doesn’t produce chaos.”

Advises Lars Kolind, “As a manager, it is important to realise that management through power is under serious attack. You can manage through the strength of professionalism, the ability to motivate and by understanding employees. It is essential for a manager to be able to create a mechanism supporting the desired trajectory of decisions. The manager becomes part of the team.”

#### Commentary

We think the challenges of leading in a VUCA world, and enabling flexible, rapid responses to a changing context, require a new style of leadership.

- Shifting from command-and-control towards inspiring and enabling, by creating a context of trust and transparency.
- Leaders becoming externally oriented, able to assemble networks of participants, being technology-savvy and identifying/tackling disruptive influences.
- In an agile, design-driven environment, good leaders will help their teams rapidly deliberate on solutions and help them self-organise to deliver selected options.

#### Values and culture

- Yammer, the enterprise social networking platform, was established on a principle of implicit trust.
- Two companies often referenced in literature are W L Gore and Whole Foods Market, both founded by CEOs with distinctive values. They push accountability for profit as low in the organisation as possible. This drives engagement, a sense of ownership and superior business performance.
- Network Rail found that a move to a new office location was a springboard for culture change. Paul MacFarlane, Director, HR Performance, explained how hot-desking, open-plan seating and different styles of communal area were used to remove people from silos and bring them together. It also encouraged cross-functional working, and created a more service-oriented culture.



“In a global business climate that is perpetually ambiguous ... knowing how best to engage a lower-risk, flexible and faster talent model can be a source of competitive advantage.”

**Miller and Miller, *The Rise of the Supertemp*, *Harvard Business Review*, May 2012.**

#### Tesco's leadership programme

- Tesco has set up a structured leadership programme for graduates with leadership potential to broaden their exposure to different parts of the organisation and prepare them for future director roles.
- With the globalisation of the business, simply running a store is no longer sufficient preparation for senior leadership positions.
- Key talent must have a broad range of experience, in many cases including international assignments.
- Leadership development is increasingly focused on structuring the careers of high-potential employees to prepare them for the most senior positions.

## 6.4 Talent

The themes of this report – the ageing workforce, digital natives, globalisation of talent, redefining careers, new sources of talent and technology – will have a profound effect on resourcing and talent management. This has a number of implications for HR.

- The ageing workforce, remaining active into their 70s, and new generation digital natives, will have to collaborate over the increasingly complex work that goes with continuous innovation and business evolution. Organisations will need ways of drawing on the skills, insights and creativity of both groups.
- The desire for purpose in their work among Baby Boomers and new generation employees requires a rethinking of talent policies if companies wish to attract and retain these people – offering sabbaticals and opportunities in pro-bono or community projects may be examples.

- The future skills needed in the more networked organisations will be different – see below. HR should ascertain that talent processes are suitable for assessing and developing these skills.
- Career paths may need to be re-drawn. The rise in flexible working and longer working lives among the ageing workforce mean people will have multiple careers. Jobs will become more fluid, with moves in and out of formal employment. Although still relevant, the traditional career path may become less common, and talent systems will need to allow for this flexibility.

- Globalisation and sourcing local talent, is both an opportunity and challenge.
- They should also consider whether new technology is being optimised to manage the employer brand, reach potential talent and adopt new approaches to assessment and development – as discussed below.

#### Tesco's approach to Generation Y

Tesco finds their younger staff do not necessarily want more from their careers, but they

- are vocal about their need for purpose at work
- need variety and become easily bored and impatient
- have high levels of self-belief and confidence and a drive for responsibility early in their career.

In response, the retailer is taking more risks with young high-potentials by giving them early responsibility and offering international/cross-functional job moves to broaden their experience.

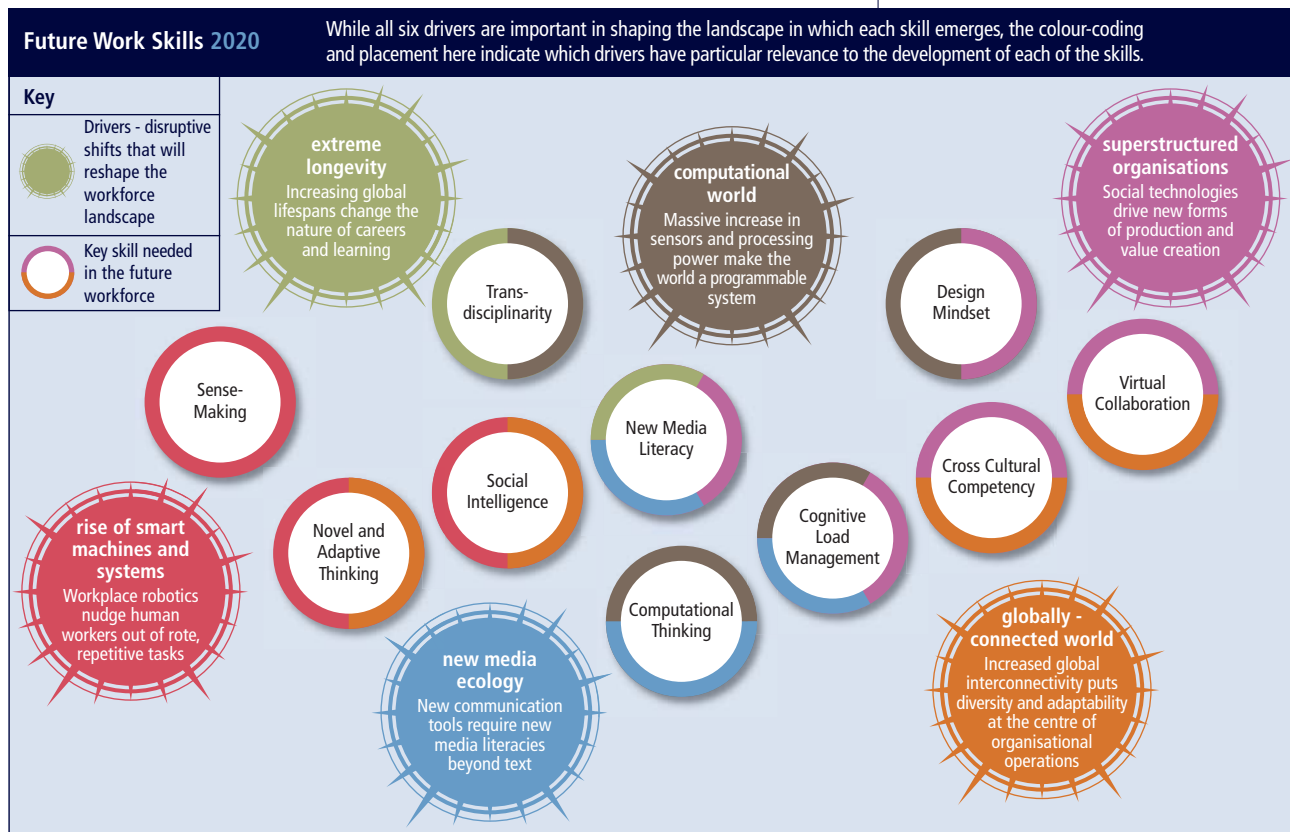
### Future work skills

Stu Winby of Innovation Point in Silicon Valley, highlights these skills he considers will be required for success in future organisations.

- Ability to handle complex, chaotic and dynamic environments.
- Strong collaborative, partnering and group interpersonal skills.
- Search skills – ability to locate information, discern the quality of data, and analyse results.
- Ability to assimilate complex information at speed.
- Technology and social-media savvy.
- Iterative design and scenario planning capability.

### Key trends to 2020

The Institute for the Future has also developed the diagram below, showing the key trends up to 2020 – and the skills individuals will need to develop to navigate these.



Source: Institute for the Future for University of Phoenix Research Institute, 2011

### Using gaming technology

An emerging trend is to use gaming technology for assessment and learning.

- Intercontinental Hotels Group is developing gaming technology to give potential recruits a light touch sense of its culture and brands – and delivering it through social media channels such as Facebook.
- Knack, an Israeli start-up, develops online games which can be used to test skills such as creativity and reasoning rather than completing psychological tests.
- Bob Johansen describes how the US Army uses gaming technology to train military personnel by simulating battle conditions.
- Johansen says that as development costs reduce, companies will use gaming more.

### Impact of technology

As discussed throughout the report, technology is having significant impacts on resourcing, talent management and learning. Interviewees reported extensive use of social media and mobile technology in building and managing the employer brand – and in attracting previously difficult-to-reach potential talent. The following are examples.

- A financial services company is on target to reduce its hiring via agencies to below 30%. Of the remaining 70%, LinkedIn is the single biggest direct hiring channel. Five years ago, agency recruitment constituted 70% of all hires.
- Professional networks such as LinkedIn have allowed Tesco to transform direct recruitment, enabling access to candidates they were previously unaware of and, thereby, reducing recruitment costs.
- Using social media to attract recruits, including video. Intercontinental Hotels Group use the tweetmyjobs app (from the App store), and a mobile app which integrates location-based services. This allows potential employees to receive information about jobs as they are passing a hotel.
- Faye Frater, VP Organisation Development at IHG, notes that “the employee journey has become longer.” This means using social media to engage earlier with potential employees and develop the employer brand profile – and keeping in touch with alumni who may rejoin the company at a later date or recommend friends.
- Social media is increasingly used in on-boarding, particularly for graduates. New generations have grown up belonging to online communities and expect this to continue at work.

Although interviewees were generally positive about the usefulness of professional networks such as LinkedIn, they had reservations about the value for recruitment of more overtly ‘social’ networks such as Facebook and Twitter. Value appears to rest with developing the employer brand, rather than sourcing potential employees.

## 6.5

### Performance and reward

We previously discussed how the future of work may mean more output-driven measurement of performance – and that technology is making it easier to measure individual work efforts. Here, we examine the implications for measurement and reward, drawing on the views of Adam Sorensen, Practice Leader at World at Work and Peter Thomson.

“The challenge will be to find ways to foster engagement from [a] more disconnected physical environment.” **Respondent to CRF member survey.**

- Pay data is becoming increasingly transparent and widely available, which means staff are more aware of their market value. An example is Glassdoor.com, a website that allows employees to share pay levels and their views on an employer. Another is the US State of Utah, which publishes salary data for all employees online. Companies are often reluctant to do this, but may need to consider it to be able to control data accuracy in the public domain.
- There is more focus on links between risk and reward in pay policies, driven partly by the banking crisis but also linking reward to longer-term business outcomes.
- Global organisations are tending towards centralised pay philosophies, but with clearly demarcated areas where local discretion is allowed – the reward strategy is consistent globally, but local implementation would be context-driven, allowing adaptations for the challenges of attracting and retaining local talent. For example, equity plans are popular in the US and UK for driving longer-term focus and retention, but do not work everywhere.

- Sorensen sees an increase – and improvement – in outcomes-based reward. However, he is concerned that the rhetoric is often ahead of the reality.
- Thomson says that changing work patterns are forcing organisations to rethink how performance is measured. For example, when women return from maternity leave and find they can achieve the same amount in four days that used to take them five, they are unwilling to accept being paid less for the same results.

- The increase in self-employed workers also encourages pay for outcomes – they control their own hours and only get paid for what they produce.

Even more radically, it has been suggested by Zuboff that we will see the emergence of complex, value-network arrangements, where an individual contribution from each part of the network will only receive compensation when the entire transaction is completed. This is the model implemented by Amazon in its independent marketplaces, where, for example, a second-hand bookseller will only be paid when the customer has received the book.

## 6.6

### Communication and engagement

The ‘disengagement’ that many employees feel was highlighted earlier. Now, new technologies can help employers engage more actively in soliciting views and inputs – allowing people to have a voice, and leaders to communicate regularly – thus encouraging transparency. This, combined with enlightened leadership behaviours, can improve the extent to which people buy-in to the purpose and achievements of the organisation.

“My perception is that senior HR people don’t spend enough time thinking about the future of work and how it might impact on the organisation.” **Paul Lomas, HR Director, Worldpay.**

#### Social media in numbers

- >1.5 billion social networking users globally.
- 80% of online users interact regularly with social networks.
- 70% of companies use social technologies.
- 90% of companies that use social technologies report some business benefit.

Source: McKinsey, *The Social Economy: Unlocking Value and Productivity through Social Technologies*, July 2012.

Social media is one of the key technologies enabling two-way communication and input across a business, particularly Enterprise Social Networks (ESNs) such as Yammer. Our research suggests companies are moving away from their initial negative or sceptical attitude – often banning their use on corporate networks outright – to recognising the benefits and using it to positive effect.

- ESNs can be effective in connecting disparate networks and enabling people to talk to each other – or encouraging physically remote people to exchange technical expertise. An example provided by Yammer was retail or franchise businesses using ESN to exchange information and promote healthy competition between branches. They can share store layouts by posting photos, or share information about successful promotions, as well as identifying and resolving problems more quickly.
- Yammer also crowd-sourced contributions to this research project on their internal company network.

Critical to a successful roll-out of social media is how leaders adopt and role-model, rather than impose. The resources needed to support ESN, such as moderation of conversations, should be considered. Of interest, Tesco now communicates frequently with staff by SMS which, surprisingly, is perceived to be more personal than communication by letter. And, some organisations use social media to mine data and reveal arising issues.

## 6.7

### The challenge for HR

As we have emphasised, organisations face a volatile, uncertain, complex and ambiguous context. Responding to this, the trends and themes of this report will be challenging – especially for organisations unable to respond quickly to significant change. Some pay lip service to trusting and empowering people, while management practices, often enforced by HR, run in a different direction.

However, the business benefits of adopting future work practices are evident, and HR has a tremendous opportunity to show leadership. Peter Thomson, co-author of *Future Work*, makes a radical suggestion – HR is responsible for organisation effectiveness; therefore, why not measure the function’s performance on the productivity levels of the workforce as a whole? We think this is an interesting, but difficult to achieve, idea – in practice, HR is not responsible for many aspects of productivity.

### Suggestions for HR

These are our suggestions for HR professionals who wish to improve their understanding of future work and help their organisations prepare for it.

- Ensure someone senior is responsible for identifying trends and reacting to them. This could be someone in HR or within strategy or R&D. They should have access to board members and be credible at that level. Everyone within the organisation should have a brief to consider this and put forward ideas.
- Increase your exposure to future trends. Read quality publications – *The Economist*, the *FT*, and *Newsweek* are excellent. Make sure you understand key trends in politics, economics and technology. Be aware of new developments in fields such as neuroscience.
- Network in the right places. Use experts such as Shaping Tomorrow, Institute for the Future, Future Foundation, McKinsey and Deloitte. (See References and Further Reading for website links.) Attend their events and sign up to their newsletters.
- Get to know the work of authors such as Bob Johansen, Gary Hamel and George Day. Think about where to look outside the organisation – Silicon Valley and the Far East are good sources of ideas. Identify companies who do this well and emulate them.
- Be aware of the 'Growth Leader' concept. Does your leadership development approach allow for people with these skills to emerge and grow? Include future scanning in leadership development activities.
- Think about who you recruit. Hiring creative types can be uncomfortable, but they can help kick-start change. Is the organisation sufficiently tolerant of difference? How do you harness the voice of the young?
- Make time to think about the implications of the future and make it part of the planning agenda. Train the HR team in how to scan the future and make it part of everyone's job.
- Is the organisation exploiting opportunities in areas such as resourcing, virtualisation, building networks and automation? Are you too conservative?

# THE CHALLENGE OF THE FUTURE

Topics covered		Introduction
7.1 Summary	64	In this chapter we reflect briefly on the issues arising from our research and summarise the key features of the future of work as we see it. Finally, we introduce a diagnostic tool which highlights areas where organisations may need to take action.
7.2 Conclusion	65	
7.3 Diagnostic questionnaire	66	

## 7.1

### Summary

We began this report by discussing the impossibility of accurately predicting the future, regardless of how desirable it might be. However, we summarise here the trends from our research that will mark out the key features of future work.

- The world of work will be increasingly **volatile, uncertain, complex and ambiguous**.
- Organisations need to become more **flexible and responsive** to deal with this complex and ever-changing environment. **A challenge for HR is to define its role in this context and avoid slowing the organisation down with unnecessary bureaucracy.**
- As well as the normal considerations of strategy and competition, organisations must deal with challenges presented by **future forces such as globalisation, sustainability, demographic changes, emerging markets and technology.**
- Particularly for service organisations, but increasingly for everyone, the **pressure to deliver an ever better customer experience at lower cost** will grow.

- New ways of **sourcing talent, fulfilling resource needs and plugging gaps in organisation capability through networks and online collaboration** are constantly emerging.
- Work in the future will be more **flexible, distributed and collaborative** and the workforce will be more **diverse**. Decreasing demand for transactional and transformational work will be replaced by greater demand for interactional knowledge work.
- Technology presents significant **opportunities to improve how, where and when work is done**, and to focus on measuring outcomes rather than inputs. The dark side, however, is the **risk of over-exposure and burnout**.

- **Individual responsibility** is a key theme for the future, both for work and careers.
- Organisations will be under enormous pressure to find effective ways of **innovating and generating new revenue streams, while at the same time optimising existing businesses.**
- They need to have effective mechanisms for **future scanning and adapting corporate strategy.**



- **Innovation in management processes has not kept up** with changes in technology and markets. Traditional command-and-control leadership should give way to a more flexible leadership style focused **on building networks, inspiring others, mapping out direction, being agile and responsive, embracing new technology and empowering people to deliver.**
- There are **tangible business benefits** to adopting many of the practices described in our report – and real threats for organisations that are slow to respond.
- The future of work will be challenging for HR. There is an opportunity to lead the way by **focusing on optimising workforce productivity.** However, the function needs to **be careful not to stand in the way of progress** by advocating outdated management practices.

## 7.2

### Conclusion

- Although it is impossible to predict the future accurately, what does seem clear is that the global competitive landscape, the shape of organisations, working practices, relationships and use of technology will look very different to today.
- Organisations need to consider carefully their response to the challenges posed by the future of work, and prepare. We were surprised that so few organisations and HR functions dedicate significant time and resources to understanding future work trends, evaluating options and developing policies and approaches in response.
- One of the key success factors is how to develop new products and markets while maximising returns on existing businesses – companies have historically been better at one or the other. For many firms, this will require a radical rethink of organisation structure, culture, leadership and performance management.
- The successful organisation of the future will be agile and able to change direction at speed. Successful leaders will be skilled at articulating a vision and developing a highly engaged workforce.
- The future of work can be both a business opportunity and a threat. New technologies, new ways of sourcing talent, global networks and the emergence of developing economies, can all be harnessed for the benefit of flexible organisations prepared to embrace new models of working. However successful they may have been in the past, companies that fail to anticipate the future, or are slow to respond, may be left behind.

## 7.3

### Diagnostic questionnaire

Taking the future of work themes discussed throughout this report, the following questionnaire is provided to help diagnose the degree to which your organisation is prepared for the future, and the many challenges it will bring.

Future of work diagnosis		
1	Do we have clearly defined processes for scanning future trends and considering their potential impact and is it clear who is responsible?	Yes/No
2	Does HR have a process for identifying future work trends and incorporating them into people plans?	Yes/No
3	Is the organisation structure fit for purpose to respond to changes in a fast-moving environment?	Yes/No
4	To what extent are our leaders externally-oriented and technology-savvy?	Yes/No
5	Do our leadership models and development activities need to be updated to reflect the styles that will be required for success in the future?	Yes/No
6	Are our flexible working policies up-to-date and do they take advantage of available technologies?	Yes/No
7	Have we assessed the risk of burnout from over-exposure to anytime/anywhere technology and do we need to establish explicit boundaries?	Yes/No
8	Do we really manage performance by outcome or do our practices need to change?	Yes/No
9	Do our talent management practices allow us to attract and retain the people we need and respond to the different expectations of new generations entering the workplace?	Yes/No
10	Have we considered what skills will be important for our people in the future and are they reflected in how we recruit and develop people?	Yes/No
11	Do we have the right mix of permanent staff and itinerant workers and are we making the most of the opportunities of technology and networks in meeting our resource needs?	Yes/No
12	Do we have the people we need to enable the organisation to respond to the challenge of developing warm relationships with customers through cold technology at low cost?	Yes/No

## REFERENCES AND FURTHER READING

Barley, S R and Kunda, G, *Gurus, Hired Guns and Warm Bodies: Itinerant Experts in a Knowledge Economy*, Princeton University Press, 2004.

Birkinshaw, J and Gibson, C, Building Ambidexterity into an Organization, *Sloan Management Review*, Vol 45, No 4, pp 47-55, 2004.

Bøtter, J and Kolind, L, *Unboss*, Jyllands-Postens Forlag, Copenhagen, 2012. <http://unboss.com>

Deloitte, *Talent Edge 2020: Redrafting Talent Strategies for the Uneven Recovery*, 2012.

Donkin, R, *The Future of Work*, Palgrave Macmillan, 2009.

Dubé, L and Robey, D, *Surviving the Paradoxes of Virtual Teamwork*, *Information Systems Journal*, Vol 19, No 1, pp 3-30, 2009.

Duhigg, C and Bradsher, K, How the US Lost Out on iPhone Work, *The New York Times*, 2012. <http://www.nytimes.com/2012/01/22/business/apple-america-and-a-squeezed-middle-class>.

Duncan, R, The Ambidextrous Organization: Designing Dual Structures for Innovation. Killman, R H, Pondy, L R and Sleven, D (eds), *The Management of Organization*, New York, North Holland, pp 167-188, 1976.

Friedman, T L, Average is Over, *The New York Times*, 24 January, 2012. <http://www.nytimes.com/2012/01/25/opinion/friedman-average-is-over>.

*The Economist*, Got Talent?: Competing to hire the best and motivate the rest, 10 September, 2011.

*The Economist*, My big fat career: How individuals can survive in the new world of work, 10 September, 2011.

*The Economist*, Winners and losers: Divisions are getting deeper, 10 September, 2011.

Gibson, C and Birkinshaw, J, The Antecedents, Consequences, and Mediating Role of Organizational Ambidexterity, *Academy of Management Journal*, Vol 47, No 2, pp 209-226, 2004.

Gratton, L, *The Shift: The Future of Work is Already Here*, Collins, London, 2011.

Greenstone Miller, J and Miller, M, The Rise of the Supertemp, *Harvard Business Review*, May, 2012. <http://hbr.org/2012/05/the-rise-of-the-supertemp/ar/1>

Hamel, G and Breen, B, *The Future of Management*, Harvard Business School Press, 2007.

Johansen, B, *Get There Early: Sensing the Future to Compete in the Present*, Berrett-Koehler Publishers, San Francisco, 2007.

Johansen, B, *Leaders Make the Future: Ten New Leadership Skills for an Uncertain World*, Berrett-Koehler Publishers, San Francisco, 2012.

Kolind, L, *The Second Cycle: Winning the War Against Bureaucracy*, Wharton, 2006.

Laurence, G, Cutting the Cord: Vodafone UK's Revolutionary Approach to Mobility, Flexibility and Productivity, 2012. <http://www.managementexchange.com/story/cutting-cord-vodafone-uks-revolutionary-approach-mobility-flexibility-productivity>

Maitland, A and Thomson, P, *Future Work: How Businesses Can Adapt and Thrive in the New World of Work*, Palgrave MacMillan, 2011. <http://www.futureworkbook.com>

Malone, T W, *The Future of Work: How the New Order of Business Will Shape Your Organization, Your Management Style, and Your Life*, Harvard Business School Press, 2004.

McKinsey & Co, The social economy: Unlocking value and productivity through social technologies, 2012.

O'Reilly III, C A and Tushman, M L, The Ambidextrous Organization, *Harvard Business Review*, pp 74-81, 2004.

Sørensen, C, *Enterprise Mobility: Tiny Technology with Global Impact on Work*, Palgrave, 2011. <http://enterprisemobilitybook.com>

Zuboff, S, Creating Value in the Age of Distributed Capitalism, *McKinsey Quarterly*, September, 2010. [http://www.mckinseyquarterly.com/Creating\\_value\\_in\\_the\\_age\\_of\\_distributed\\_capitalism](http://www.mckinseyquarterly.com/Creating_value_in_the_age_of_distributed_capitalism)

Zuboff, S and Maxmin, J, *The Support Economy: Why Corporations are Failing Individuals and the Next Episode of Capitalism*, Penguin, London, 2002.

### Websites

[www.deloitte.com](http://www.deloitte.com)

[www.futurefoundation.net](http://www.futurefoundation.net)

[www.iftf.org](http://www.iftf.org) – Institute for the Future

[www.mckinsey.com](http://www.mckinsey.com)

[www.shapingtomorrow.com](http://www.shapingtomorrow.com)

## APPENDIX: PARTICIPANTS IN THE RESEARCH

### Interview participants

Celia Baxter, Director of Group HR, Bunzl.

G B S Bindra, Global Innovation Director and Strategy Leader, Logica.

Jonathan Briggs, Head of Resourcing – Wealth Management, Royal Bank of Scotland.

Stephen Brooks, Partner, PA Consulting.

David Cartwright, Group CEO, EMEA, Arise Virtual Solutions, Inc.

Daniel Cloke, HR and Property Director, and David Fry, Head of Property, Vodafone UK.

Professor Peter Cochrane, Co-Founder, Cochrane Associates.

Jamie Cooke, VP Human Resources, Discovery Networks, CEEMEA.

Leatitia Dobson, HR OD and Capability Consultant, and Arabella Slator, former Digital Consultant, Aviva.

Maxine Dolan, Group Leadership Development Director, and Robbie Dagger, Head of Resourcing – UK Commercial and Marketing, Tesco.

Rick Emslie, Deputy Chairman, AdviserPlus.

Owen Ferguson, Product Development Director, Good Practice.

Faye Frater, VP Organisation Development, Intercontinental Hotels Group.

Louise Harrison, HR Director, Future Skills, Telefonica Digital.

Julie Hudtohan, Global HR Director for HR, Unilever

Michael Jackson, Chairman, Shaping Tomorrow.

Professor Bob Johansen, IFTF Distinguished Fellow, Institute for the Future.

Bjarne Kaavé, Process Architect, Tryg Insurance.

Lars Kolind, CEO, Kolind A/S.

Nick Laird, Chief Commercial Officer, Ceridian.

Steve Latchford, Business Development Manager, RWorks.

Paul Lomas, HR Director, Worldpay.

Paul MacFarlane, Director, HR Performance, Network Rail.

Gary Marshall, Group Head of Talent, Clarks.

Siobhan Martin, Global HR Business Partner, Mercer.

John Meyer, Co-Chairman/CEO, Arise Virtual Solutions.

Karen Reeve, Business Solutions Manager, SHL.

Annemie Ress, Global Head of People Innovation, eBay.

Adam Sorensen, Practice Leader, World at Work.

Susie Thompson, Group Head of HR, and Neil Morrison, Group HR Director, Random House.

Peter Thomson, Director, Wisework Ltd.

Jill Trafford, Consulting – People and Programmes, and Simon Haines, Senior Manager, Deloitte.

Monika Wencek, Customer Engagement, Mike Grafham, Head of Customer Success (EMEA) and Angelika Kempf, Director Marketing and Communications (EMEA), Yammer.

Stu Winby, Partner, Innovation Point.

### Organisations responding to the e-survey

Anglo American plc.

Associated British Foods Plc.

BAE Systems.

Bird & Bird.

BP International Ltd.

BskyB.

Cambian Group.

Ceridian.

Dyson Ltd.

John Lewis Partnership.

Liberty Global Europe.

New Charter Housing Trust Group.

Nuclear Decommissioning Authority.

PARC.

Royal Bank of Scotland.

Royal Mail.

Simmons & Simmons.

Standard Life.

Tesco.

Transport for London.

Vodafone.

Whitbread Group plc.

William Hill.



CORPORATE RESEARCH FORUM

**Corporate Research Forum**

One Heddon Street Mayfair London W1B 4BD United Kingdom

T + 44 (0) 20 7470 7104 F + 44 (0) 20 7470 7112

[www.crforum.co.uk](http://www.crforum.co.uk) [enquiries@crforum.co.uk](mailto:enquiries@crforum.co.uk) @C\_R\_Forum