WORKING IN THE FUTURE

CONTENTS

INTRODUCTION

The forces reshaping the way we work are many and varied – and companies must be prepared to face them all, writes The Economist Intelligence Unit

It used to be the case that staff worked the way they were told to by their employers. It was therefore the objectives of the organisation – efficiency, in most cases – that defined the working style of the majority.

In the last century, another major influence on working practices was information technology. We need look no further than the modern-day office to see how much of an influence it has been – many of us spend our working lives gazing at a computer monitor.

New technologies are changing work styles again. Most significantly, smart mobile technology and home broadband make it easier than ever to work outside the office. The notion that work is somewhere you go is now overshadowed by the concept that it is something you do.

As a result, companies construct the working experience of their employees as much – if not more – through their choice of technology as through the location and design of their offices.

This is something that employers are waking up to. Businesses that support "bring your own device" policies, despite the cost and/or risk, do so in recognition of the technological self-determination that many employees crave.

But as they define the working life of their workers through technological, organisational or HR policy means, it is not enough for companies to simply chase the latest trends. They need some end goal in sight, an ideal experience of work that links the desires of employees with the objectives of the organisation. And to do that they must consider the factors that influence the future of work holistically.

The purpose of this report, sponsored by Fujitsu, is to help them do just that. The Economist Intelligence Unit invited a range of experts from academia, industry and professional services firms to share their views on a trend that is changing the way in which human beings work.

Toni Schneider, the former CEO of the company behind WordPress, a publishing platform, explains how being a diffuse organisation allowed it to scale up with a minimum of investment (page 5).

Professor David De Cremer of the Cambridge Judge Business School in the UK explains how employees' irrational reactions will influence the impact of globalisation on work (page 7).

On a related note, Charles Grantham, a researcher and consultant, writes that it is shifting attitudes among workers of all ages, not simply a generational divide, that will really reshape working life in future (page 9). And Philippe de Ridder, the co-founder of Board of Innovation, a consultancy, explains that the intrapreneurial mindset will become more prevalent as demand for innovation grows (page 11).

Similarly, changing perceptions of what it means to be a 'sustainable' business will radically redraw the relationship between companies and the communities that surround them, as Professor Dean Bartlett at London Metropolitan University writes (page 13).

On a more practical note, Bridget Treacy, a partner at Hunton & Williams and eminent data protection lawyer, explains how the data protection regime in Europe will affect the degree to which companies can analyse the behaviour of their employees (page 15).

Together, these articles reveal the diversity of drivers that are changing the way we work. A common thread, though, is the growing importance of a sense of purpose in the workplace. If a company has a mission beyond simply shareholder value and employees are bought into it, then they can and will find their own best way to work – the company just needs to make it possible. ■

THE POWER OF THE DISTRIBUTED WORKFORCE

Allowing its staff to work from home all around the world helped technology start-up Automattic achieve remarkable success, writes its former CEO, Toni Schneider

When Automattic, the technology start-up I ran for eight years, was founded back in 2005, we had a unique advantage: a running start.

The software we were basing our business on, WordPress, had already been available for two years as an open-source project. It had thousands of users, which meant we had customers and revenue from day one. It also meant that there were dozens of open-source volunteers working to improve the software in their spare time – an ideal talent pool from which to hire our first employees.

But there was one big challenge: this group of volunteers was spread all over the world, with Donncha based in Ireland, Andy in Texas and Matt and Ryan in California. Should we be like other technology start-ups, open an office in San Francisco and ask everyone to move there? This turned out to be an existential question that shaped the core culture of our business and led us to become a pioneer in creating a distributed workforce. We decided to let everyone work from home.

People started joining our company from all over. We connected via chat rooms and blogs, where we communicated and collaborated all day long. Soon we realised that we wanted to spend some time in person, so we got together for week-long coding retreats two or three times a year. All along, this distributed work environment felt right to all of us inside the company, but it caused friction on the outside. Partners thought it was weird that we had no offices (we later opened a co-working space in San Francisco for meetings and events).

Lawyers and accountants warned us that we would soon be sued by someone about violating some labour or tax rule that we had overlooked. Investors were convinced that our org chart would fall apart when we got to 30 or 40 people.

Before we even got to 20 people, a moment of truth arrived. Our product was doing very well – we were rapidly approaching 100m users – and someone offered to buy our business for a huge amount of money. We had to decide whether we wanted to sell or keep going. If we kept going, would we raise more money and "grow up" by centralising our business in San Francisco? We decided to stay independent and raise more money, but remain distributed. Why? Because even early on we could tell that working from home was incredibly empowering for our employees and a big competitive advantage for our business.

Our company is now 260 people strong, working from over 30 countries and 190 cities across the world. The doomsday predictions from partners, accountants and investors never came true. On the contrary, our company is thriving. We are number in our industry (WordPress currently powers 22.9% of all websites on the Internet), and employee happiness, retention and productivity are all extremely high.

Based on our experience, I am convinced that distributed workforces will bring change to many organisations and industries in the next decade. The change is driven by three core factors: flexibility, global talent and visibility.

Toni Schneider,
Auttomatic

> *Increased flexibility over work environments leads to happier, more motivated employees*

FLEXIBILITY

Employees on distributed teams get much more flexibility to shape their working lives. They control their schedules and work environments, they tend to have far fewer meetings and no commute – and of course, they can live wherever they choose to.

For many people, it comes down to something as simple as being able to take their sick child to the doctor without needing permission from a boss or feeling guilty about leaving the office. Once an employee has experienced that kind of flexibility, they never want to go back to the old ways. The flipside is that distributed employees need to be more self-motivated to get work done outside the traditional confines of set working hours and cubicle walls, which is not always easy and requires proactive coaching and mentoring from the employer.
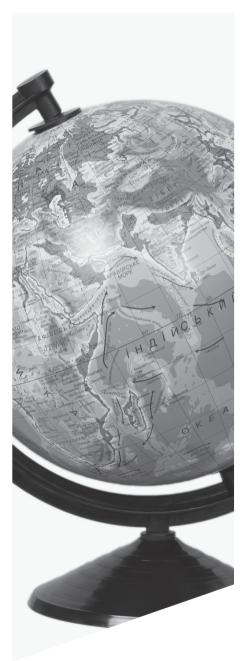
GLOBAL TALENT

For a company, being distributed means having access to a global talent pool. There is no need to compete over local talent. A distributed company attracts people from all over the world who raise their hand to say that they want to join this particular organisation even though it is thousands of miles away. The Internet and our modern communication tools make those distances meaningless. If anything, distributed teams tend to work more efficiently because contributions are measured by results, not appearances, and because online tools expose just how arcane and inefficient it is to get groups of people into rooms all at the same time to discuss project status. Distributed workforces do cause increased HR complexities, but they are getting solved and are outweighed by the benefits of a global hiring pool.

VISIBILITY

Distributed teams tend to quickly abandon old communication methods, such as meetings and email, and transition to new, more real-time tools such as chat rooms and video conferencing. These tools are a must-have for teams that work across lots of devices and time zones, and they have the added benefit of making information more visible to the entire company. A particular team might use a real-time chat channel for the majority of its communications, and that channel can also be made accessible to the rest of the company. That way anyone can follow developments, contribute and search old archives for information. Paradoxically, this increases visibility for the entire organisation, despite people being in different locations. It also helps answer the first question many managers have when it comes to distributed teams: How do I know whether people are working? Seeing someone's daily activity in a chat channel is like seeing a heartbeat of their contribution to the organisation.

Taken together, we get increased flexibility over work environments, which leads to happier, more motivated employees; a global talent pool that helps businesses be more competitive; and higher-visibility communication tools that lead to more productive organisations.

The changes an organisation needs to go through to adopt distributed teams are not trivial. But the benefits are valuable to any organisation of any size. And they are more achievable than ever in our connected age, where we can turn on a phone or laptop anytime and connect with our co-workers from anywhere in the world. ■

IRRATIONALITY AND GLOBALISATION'S IMPACT ON WORK

A macroeconomic view alone cannot predict how people will react to the growing globalisation of work, writes Professor David De Cremer of the Cambridge Judge Business School

When thinking about the future of work, it is always tempting to take the macroeconomic view.

In the past, this macroeconomic perspective was influenced significantly by the belief that technological developments, such as the use of robots, would lead to declining hours of work, as witnessed from 1830 to the 1970s.

The theory was that how people felt about the shape and design of work would become insignificant as these considerations became a less important part of their lives.

However, despite the considerable technological developments of the last three decades, we have not seen a reduction in the significance of work to our lives. In fact, people seem to work harder than ever. Political interventions across Europe are focused on activating the unemployed and making everyone work longer to ensure the survival of our pensions and social security systems.

It is therefore insufficient to consider the future of work from a macroeconomic perspective alone. We must also focus on the experience of the people actually doing the work.

For example, when assessing the influence of technological innovations on the shape and nature of work, there is a gap between what is technically possible thanks to those innovations, and the way in which people react to them and use them.

Many IT developments are created in a rather isolated world, and we always have to wait to see how these applications will work out. How will people deal with the physical transformation of the workplace and the impact on human relationships?

Understanding the irrational nature of human beings may help us to anticipate the future of work more accurately, and to identify the main challenges that will arise.

This is especially true when considering the impact of globalisation on the future of work.

GLOBALISING MINDS

When we talk about globalisation in the business world, we think about transnational organisations going beyond the boundaries of their home nation to find new customers and suppliers.

This clearly has an impact on the way people work. As the distance between co-workers grows, organisations will increasingly use virtual teams who collaborate remotely, and employees are likely to work more frequently from home. Long-distance business travel will be needed less as a result, which is cost-effective as energy prices keep going up.

Another important aspect of globalisation, though, is the rapid development of technology and the growing access to it. It is estimated that in 2025 about 5bn people will be online, out of an estimated total world population of 8.2bn.

Professor David De Cremer
Cambridge Judge Business School

> **Understanding the irrational nature of human beings may help us to anticipate the future of work more accurately**

To reach out to all these consumers, organisations will create market value by adopting virtual platforms that can be developed quickly, but also abandoned very quickly.

These are all rational responses to globalisation. However, human irrationality is already in evidence in the way employees are responding to these trends.

For example, being able to work online may make a lot of sense, but recent research by the London Business School in fact shows that if you want to increase your chances of promotion in an organisation, your bosses still want to see your face around the office.

In an interesting way, this strong tendency to demand a physical presence in the office may well go hand-in-hand with the contemporary focus of our institutions and organisations on the introduction of more regulation systems and administrative controls, which in essence reflects a lack of trust towards employees and citizens. If this is true, then the future of virtual teams and working at home may not, in fact, blossom.

Meanwhile, although consensus exists that sustainability should be on everyone's agenda, the strategy of many low-cost airlines moves in the opposite direction. The Irish budget airline Ryanair recently introduced a business-class flight with the explicit aim of ensuring the existence of business travel.

Globalisation is not simply the concern of large organisations. The ability of skilled employees to move between countries with relative ease – or to find work remotely – in order to follow employment trends and investment opportunities has led to a significant increase in freelance workers.

For these freelancers, the subjective experience of work will be of great significance. Trust between freelancers may be challenged when compared with colleagues within an organisation, and so it will become a highly prized commodity in the globalised workforce. Cultural differences will also have a significant impact on the flow of work.

Here we see how subjective, sociological issues may grow in importance as globalisation continues.

A major challenge for organisations will be maintaining the ability to do business at the right time in the right place while still building trusted relationships with customers and suppliers. Being agile will therefore become even more "the" defining feature of entrepreneurship in the future. Hence having a strong focus on flexible employees and organisations seems rational and cost-effective.

However, agility may nevertheless present a threat for the long term.

For businesses to remain sustainable, innovation is key. Globalisation will in my view promote more of a focus on an incremental type of innovation aimed at adjusting breakthroughs to local ever-changing needs. But this incremental innovation will come at the cost of major innovative breakthroughs in basic knowledge, which are less likely to emerge under conditions of flexible employment contracts.

High degrees of uncertainty caused by global competitive market pressures may lead to less investment in ideas that take time to develop and only show their true value in the long term.

All these examples make it clear that the gap between the rational perception of how globalisation can transform the future of work and the reality of how people will deal with those changes in their own irrational way is still significant.

It requires a better guidance of the globalisation process of work at both the level of organisations and individuals and the development of trustworthy relationships. ■

HOW ATTITUDES TOWARDS WORK ARE CHANGING

The way people of all ages think about work is changing, and organisations need to adapt accordingly, writes researcher and consultant Charles Grantham

A common question in management discussions is: "How do we manage Generation Y?" When business leaders look at the employees now entering the workplace, they see people whose values and beliefs appear to be very different from their own.

However, the assumption that this new generation of workers (often termed "millennials") has a new, unique attitude towards work is not supported by research. In fact, members of older generations may well hold similar views to these millennials.

There are certainly significant differences in attitude across groups of workers, but "age" is not the only – or most important – variable. Many factors contribute to these differences, including advances in communication technology, changes in social status and shifting power expectations.

Traditionally, the commonly held view was that work in general was a source of self-worth and identity. You were what you did and for whom. The new, emerging attitude is that work is simply a means to a larger end; it is no longer a way to define oneself.

Old-style management techniques and methods stem from an industrial era where authority was assumed to be respected and followed explicitly to enhance efficiency. This is no longer an operative assumption for business leaders. Instead, what seems to be emerging is that workers ignore formalisms in favour of team decision-making.

Work style is changing in parallel with authority operating mechanisms. Instead of command and control built on military models and "Theory X" – MIT professor Douglas McGregor's terms to describe the assumption that workers are lazy – collaboration is the style. There is a subtlety, though: collaboration is not co-operation, nor is it co-ordination. Collaboration is shared understanding and agreement with a business's mission and purpose.

Reward structures are also shifting from being primarily based on direct monetary compensation towards a "total rewards" paradigm, where both intrinsic and extrinsic rewards are balanced.

Likewise, the work/life balance is now perceived differently, with "work" seen as a secondary activity in one's total life scenario. Work has descended Maslow's hierarchy of needs, and opportunity for growth is seen as a personal responsibility, not a company perk.

The psychological driver of the workforce of the future will therefore be "making a difference", not just "making a living", as is currently the case.

Charles Grantham
Researcher and consultant

> "
> **I see a role for new guild-like groups in developing local talent in a way that meets the needs of citizens**

THE IMPACT OF ATTITUDES

There are four major implications of this swing in attitudes. First of all, there is a change in the very nature of the social contract between "worker" and "employer". It is no longer best described as "management": it is leadership in a socially responsible manner, with sustainability the paramount goal of leaders.

Next is a move from hierarchical communication, power flows and status differences to a more collaborative model. Small, collaborative groups will combine temporarily for projects, break apart and form new alliances. Emphasis is on teamwork, and your rewards come from your immediate contribution as evaluated by team members.

These first two implications give rise to a third. Simply put, the need for middle managers will decrease significantly, because collaboration does not require a constant reframing of mission, goals, direction and responsibility.

The fourth impact is that we need entirely new concepts of what employees are and do. A new vocabulary is needed to lead enterprises towards increased profitability and sustainability. There is no job title that describes what it is that today's talent contributes to the organisation. I propose "artisans of thought"; artisans are people who continuously practice creativity and invention.

NEW STRUCTURES

With all these changes going on, how will this new pool of talent organise themselves? If they no longer depend on enterprises to set their compensation, provide education and career pathways, how do they self-organise? The answer lies in pre-industrial social structures.

Before corporations and labour unions we had guilds. This is where you went to get trained for an occupation; this is where you went from apprentice to journeyman and finally master; this is how you connected with people who needed your unique services. I see a role for new guild-like groups in developing local talent in a way that meets the needs of citizens, and commerce and communities are made sustainable in both an economic and social sense.

In summary, the changing attitudes of the workforce are going to require everyone – employees, managers and executives – to become more agile and innovative. All of us will have to reboot, rebrand and reposition ourselves to meet the challenges of the new reality.

This is especially true of those whose purpose it is to be a leader. Because of changing demographics and the attendant shift in beliefs and attitudes, a different form of leadership will be required in the coming decade. These new business leaders will need to understand how to align people's personal purpose with that of the organisation and the market context in which they operate. ■

WHY INTRAPRENEURS ARE THE WORKERS OF TOMORROW

As large companies face fiercer competition from start-ups, they will need to empower their workers to act like them, writes Philippe De Ridder, co-founder of Board of Innovation

In 10 to 20 years' time most businesses will be populated by a new kind of employee, people who do not just bring their own devices, but their own business ideas, working practices and even their own teams of people. These are intrapreneurs: employees who behave like entrepreneurs in the context of large organisations.

Intrapreneurs are already flourishing in pioneering companies such as Google and GE. But what is today cutting-edge will in future be mainstream, and any company which values either strategic innovation or talent engagement and attraction has a very compelling reason to embrace intrapreneurship.

According to research by Richard Foster, the McKinsey consultant who coined the term "creative destruction", over 75% of companies currently in the Fortune 500 will be replaced by 2027, and the rate of replacement is only accelerating.

In many industries, incumbent enterprises are being challenged by new start-ups, whether this is Uber in the transport sector, Spotify in the music industry, AirBnb in the hotel business or disruptive newcomers in energy or banking. These start-ups are applying disruptive new business models and can launch new offers at lightning speed.

In order to keep up, large organisations need to innovate at similar speed and, as such, adopt the techniques that start-ups use to develop new business.

Meanwhile, research by Gallup shows that more than 50% of US employees are not engaged at work, resulting in an annual productivity loss of about US$300bn. At the same time, unpaid volunteer work and community engagement are on the rise. Our 20th-century view of organisational structures and human motivation, underpinned by extrinsic motivators such as money to perform routine tasks, is an anachronism in today's world.

In order to attract talent and keep them engaged, large organisations need to create contexts in which individuals can direct themselves, expand their capabilities and make a meaningful contribution. If not, talented people will join organisations that do, or worse, they will start new competitors.

THE INTRAPRENEURSHIP MINDSET

According to research by IBM, the single biggest barrier to innovation at large organisations is not budget or process, but culture. Enabling intrapreneurialism is therefore first and foremost a mindset and culture shift.

In this shift, organisations have to move from a compliance and control culture to a culture of autonomy. An organisational intrapreneurship mindset is characterised by a great level of decentralised agility rather than strong central planning; a long-term purpose rather than short-term profit goal; and a greater number of "makers" rather than "managers" within the organisation. The future organisation itself can be pictured as a fluid, open network – significantly different from the static, siloed structure we still see today. .■

Philippe De Ridder
Board of Innovation

> The single biggest barrier to innovation at large organisations is not budget or process, but culture

Think of the army and an open-source network such as Wikipedia as two sides of the extreme within this spectrum. The key difference between the two is their idea of what it is that motivates people.

Another critical but hard-to-manage aspect of company culture is the acceptance of failure, which is crucial for people to take risks and dare to innovate. That is why big companies such as Tata, the Indian conglomerate, are awarding failed innovation projects in order to create a culture of failure-acceptance and risk-taking among the company's 500,000 employees, to name but one example.

Most intrapreneurship programmes at large companies are focused on creating new business. Some organisations adopt the tools of technology start-ups, such as hackathons, innovation boot camps and internal accelerators, which offer employees the chance to come up with new business ideas and develop them into validated prototypes ready for scale-up. New business projects that come out of such programmes often follow through as a newly launched corporate venture, with a different set of key performance indicators and processes to follow.

For this kind of intrapreneurialism to work, the organisation must create the right conditions, giving projects a high degree of autonomy and just the right amount of funding. In an academic context, MIT's Pierre Azoulay found that funding mechanisms that tolerate early failure, reward long-term success and give great freedom to experiment resulted in better and more frequent academic papers. The same applies in business: short review cycles, pre-defined deliverables and policies unforgiving of failure do not support intrapreneurship.

INTRAPRENEURS EVERYWHERE

Individuals do not have to wait for their organisations to create the conditions for intrapreneurialism, however. In fact, the mindset can be applied in any role – and not just knowledge workers, as is commonly thought.

The customer service function at online shoe retailer Zappos.com (now a division of Amazon.com) is a case in point. In contrast to typical call centres, where everything is scripted (resulting in huge employee disengagement and high annual turnover rates), Zappos offers its customer service agents a large degree of autonomy in helping customers the best way possible: no timing, no scripts, no control. As a result, Zappos consistently outperforms its peers as one of the best companies in terms of customer service as well as employee engagement.

Amy Wrzesniewski and Jane Dutton, two business school professors, have also found intrapreneurial behaviour among hospital cleaners, hairdressers and nurses and the positive impact it has on their job satisfaction. It is also possible to create formal systems that generate a significant amount of autonomy and more intrapreneurial behaviour, such as Netflix's system of unlimited holidays and Google's 20% time to work on any project of choice.

Whether organisations wish to innovate as fast as new start-ups entering their industry or to attract and engage talented people in their organisation, the chances are that they will benefit from an intrapreneurial culture. For leaders who wish to install that culture, the best way to start is by working like entrepreneurs themselves. ■

SOCIAL SUSTAINABILITY AND THE NATURE OF ORGANISATIONS

The sustainability agenda is expanding to include social concerns. This will force companies to change the way in which they interact with the communities around them, writes Professor Dean Bartlett, co-director of the Centre for Progressive Leadership at London Metropolitan University

While maximising profits for shareholders will remain a top priority, businesses are increasingly expected to take account of their impact on both the environment and the communities in which they are located.

Indeed, the sustainability agenda is expanding beyond "environmental sustainability" (ie, reducing the carbon footprint over time, with the eventual aim of becoming carbon-neutral) to include also "social sustainability" (ie, minimising the negative impact an organisation has on the communities that surround it, while increasing any positive benefits to those communities and society in general).

This broadening of sustainability will force businesses to engage with a much broader set of stakeholders than is currently the case. Companies will be obliged to think not just of their own shareholders, staff and customers but of anyone who is affected by their actions.

As a result, the role of the business leader in the future will have at its heart the ability to align a more diverse group of people amid large-scale change that occurs far beyond the boundaries of their own organisation.

This will ultimately lead to systemic change in the very means of production and our modes of consumption. During the transition, the way in which organisations are structured and managed will change. They will become looser, more open and more creative, and the conventional corporate hierarchy will be inverted. Customers and the frontline staff with whom they interact will become more powerful, while the role of managers will be to serve those on the frontline.

The scope of their concerns will become much wider still in future, and will be driven by a wider range of political and ethical concerns. This will be the impact of sustainability on the future of work.

BEYOND ENERGY

The low-hanging fruit of sustainability, such as energy-saving technologies and more sophisticated approaches to waste reduction, will soon become the norm. They are easy for businesses to adopt because they save money, and they will have the most immediate impact on the workplace.

Employees will find themselves having to adapt to technological eco-innovation and to readjust to newly emerging green workplace practices. Examples of technological eco-innovations include low-energy office hardware and the development of green buildings. Green workplace practices include the introduction of sustainability-performance dashboards into the management toolkit, for example, or hiring and incentivising staff on the basis of sustainability criteria.

Coping with the pace and scale of change will require a great deal of resilience. Furthermore, the wider context within which individuals find themselves working will be changing. Jobs will become less secure as whole industries reinvent themselves. Careers will be punctuated by abrupt changes in direction, more intense periods of retraining and much greater connectivity with the wider world in a continuation and acceleration of current trends.

Professor Dean Bartlett
London Metropolitan University

> ❝
> **Everyone will become a stakeholder in the increasingly networked context in which businesses operate**

However, an even greater impact will be felt as the distinction, such as may currently exist, between "environmental" and "social" sustainability breaks down.

Even if a given business practice or particular consumer product is in itself environmentally friendly, it is doomed to failure unless it is also socially sustainable. In the short term, changing individual employees' behaviour as they adjust to new ways of working is a necessary social process; the maintenance of such individual behaviour is sustained socially.

In the longer term, however, as the boundaries break down between those who work in, for or with the organisation and those who constitute a legitimate stakeholder in some other sense, the inherently social nature of sustainability will come to the fore.

Everyone will become a stakeholder in the increasingly networked context in which businesses operate in the future. This manifests itself most clearly at the present time through social media, which will become universal in their reach and whose role will expand.

Initially, the primary role that social media will play is in helping to cement in the global consciousness an acceptance that our ecosystem is unable to withstand a simple replication of the path pursued by industrialised Western societies over the previous century or two.

The role of social media will increase over time, going on to become a more active catalyst as businesses increasingly find themselves having to justify their sustainability practices through social media in order to avoid reputational damage.

This will drive businesses to constantly reinvent themselves as they negotiate their changing relationship with society. Finally, it will become an essential ingredient in the invention of new paradigms for the pursuit of profit and will also act as a powerful regulator of precisely how these new ways of doing business become enacted.

The business leader of the future will become a "social facilitator" and "business model innovator", and we will all be participating in some way as stakeholders of some sort, be it as an employee, employer, shareholder, customer or competitor, or simply as a global citizen of the future.

Networks of suppliers, partners, customers and other stakeholders will interact in increasingly complex and unpredictable ways. The constant reconfiguration of roles, relationships and transactions will mean that a new operating model will emerge. It will see the organisation of the future constantly morph as it rides successive waves of "sustainable advantage", which will come to replace "competitive advantage" as its main source of business success over the longer time horizon.

This is because only those businesses that are perceived as environmentally sustainable will be socially acceptable (and therefore socially sustainable) as stakeholders demand greener products and greater corporate social responsibility. It will become increasingly difficult for businesses to hide misdemeanours on either front, given the platform that social media give any stakeholder to raise concerns.

Hence, only the most sustainable organisations will stand any chance of survival, since their advantage will stem increasingly, and then predominantly, from sustainability rather than from any of the other factors on which businesses have traditionally competed, such as cost, quality, etc.

Successful businesses will be transient in nature as they strive to author their own destruction and reinvention in the dogged pursuit of sustainability, driven by conditions of increasing population growth and depleting natural resources. While it is impossible for us to envisage precisely how these workplaces of the future may look, they will certainly have sustainability at their core. ■

PRIVACY, DATA AND WORKFORCE ANALYTICS

Data about employees offer businesses valuable insights, but in Europe their use is carefully regulated, writes Bridget Treacy, a partner at the law firm Hunton & Williams

Data analytics is transforming our understanding of the world. Analytics – the rapid processing of large volumes of data using sophisticated algorithms – allows us to make sense of and gain insights into seemingly unconnected events.

Increasingly, it is used within the workplace to understand how people work, to improve efficiency and safety or to identify talented staff for further development purposes – a practice known as workforce analytics.

This promises considerable savings. According to consultancy Deloitte, one national bank was able to save US$18m by analysing its workforce data to spot opportunities to redeploy staff, rather than laying them off.

A hotel chain analysed the behavioural characteristics of 2,700 team leaders across its organisation and compared the data with customer satisfaction and sales information. It found that the behaviour of leaders was directly correlated with customer satisfaction and, in turn, revenue, to the extent that it was able to predict sales figures based on the performance of leaders.

As these examples show, businesses can derive much value from analysing data about their workers. However, just as company use of customer data is carefully controlled, employee data protection rights in the EU restrict how employers can deploy data analytics in the workplace.

Some data that might be used in workforce analytics are the personal data of employees. Processing employees' personal data is regulated by data protection (and employment) law safeguards that can significantly curtail how employers use employee personal data.

In contrast to the US, where individuals typically do not have any expectation of privacy in the workplace, in Europe data protection and privacy rights do apply at work, and companies must be aware of their legal position before subjecting their staff to workplace analytics. This need will only become more pressing as the amount of data companies collect about their employees grows and the techniques to analyse them become more widely available in future.

EU DATA PROTECTION

European data protection rights evolved in the era after the second world war when secret reporting by the state about citizens was commonplace. Individuals had no right to discover whether, and if so what, information was held about them, or to verify or correct it.

Decisions were based on the content of the state's files, sometimes with tragic consequences. Accordingly, European data protection law, enshrined in the European Data Protection Directive EC/95/46 (the "EU DP Directive") , gives individuals enforceable rights in relation to their data, including the right to access their data, to correct them and, in some circumstances, the right to object to how their data are processed.

Clearly there is potential for employees' exercise of these rights to conflict with their employers' wish to use the data in an analytics context.

As well as ensuring individual rights, European data protection law imposes a range of obligations on organisations that collect and determine how personal data are to be processed. In the context of workplace data analytics, the following requirements are particularly challenging.

Bridget Treacy
Hunton & Williams

'

Data analytics can deliver valuable insights but minimising privacy risk requires planning ahead.

- **Employers must satisfy one of a limited number of prescribed legal grounds in order to collect or use personal data.** A company's right to process employee personal data for analytics purposes will most likely be judged on whether it is in the company's "legitimate interests" and not overridden by the employee's fundamental rights. This requirement is interpreted restrictively by regulators, and employers will need to consider their proposed analytics on a case-by-case basis. A privacy impact assessment is the preferred tool for conducting this assessment, and often the privacy impact can be limited sufficiently to enable the analytics to proceed.

- **Individuals must be told how their data will be used.** Currently, employers might state that personal data will be used to administer the employment relationship, but few employers tell their employees that their data will be used for analytics purposes. Also, it is common in an analytics context for data to be obtained from sources other than the individual, for example, from a third party, through observation, or by deriving them from other data processing. Providing notice to employees, and ensuring fairness and transparency in the workplace, requires careful planning. If this key step is missed, employees can easily misconstrue the purpose of analytics and assume that their individual performance is being monitored.

- **Data collected for one purpose may not be used for a further purpose that is incompatible with the original purpose.** This key legal requirement is difficult to satisfy in the context of analytics, where employers may wish to use data for a range of purposes not originally envisaged or referable to the employment relationship.

- **Data minimisation and retention.** These obligations require that data must be relevant and not excessive for the purposes for which the data were collected. There are obvious tensions between data minimisation and data analytics. It is not permitted to retain personal data indefinitely, yet that is exactly what data analytics assumes.

Individuals tend to object to the processing of their personal data when it is unexpected, or intrusive. In the workplace, employees typically are concerned that data analytics might be deployed to measure their individual performance, and that decisions will be made about them based on analytics, including termination.

Employers are not allowed to make decisions that significantly affect employees based solely on automated processing. Instead, analytics should be used to derive trends and to predict behaviour across the workforce. Works councils tend to examine the use of analytics in the workplace very carefully, and there have been a number of complaints to European data protection authorities on this issue.

What can employers do to manage and mitigate the risks of analytics in the workplace? The first consideration should always be to assess whether personal data are needed at all or whether aggregated, anonymised information can be used. Data protection laws only apply to personal (ie, identifiable) data. Depending on the context, many types of analytics tools are just as effective when they use anonymised or "pseudonymised" data.

Employers should ensure that they are transparent in their proposed use of analytics in the workplace. Telling employees that analytics will be deployed, what data will be used, what the purpose of the processing is and what the data will not be used for can give employees comfort and pre-empt complaints.

Looking ahead, a new European data protection law is being negotiated at present, and the direction of travel of the proposed General Data Protection Regulation is towards a more restrictive, prescriptive regime for Europe in which individuals' rights are strengthened. Penalties for breaches of the data protection law are almost certain to be significant, with fines of up to 5% of global turnover being discussed.

Data analytics can deliver valuable insights, and in many cases can be deployed in the workplace with minimal privacy risk. But minimising privacy risk requires planning ahead. . ◼