

The New World of Work

Evolution of the UK Workforce

White Paper Published 2007



Are your **people**  **ready?**

Abstract

Britain has always been at the forefront of economic change. First, it was the agricultural revolution, then the industrial boom of the 19th century. Now the world is changing radically again, and it is critical that the UK's businesses, public institutions and people meet that change creatively.

The change we're facing today is multi-faceted. A revolution in technology and the application of both IT and communications networks has shifted our preconceptions about the location, purpose and value of our work. Demographic shifts are creating an aging population. A growing skills shortage is putting pressure on the education system and businesses to create knowledge workers with cutting-edge expertise; and also to ensure that people who were previously marginalised in economic terms are brought back into the workplace. Social change – particularly among the young – is forcing us to challenge assumptions about "career" and "the work ethic". And, above all, global interconnectedness is creating a new "supermarket" for goods and services.

The *New World of Work* is a Microsoft® framework for understanding how all these forces will impact on organisations – it is designed to help us understand them better and channel them into improvements both in the workplace and for society.

In the UK, Microsoft is committed to addressing the needs of businesses of all sizes: supporting those companies and organisations in using technology to generate value and competitive advantage; showing how they exhibit innovation and entrepreneurialism; and driving their businesses forward through strong leadership and helping their employees work in a happy and productive environment.

Today's workplace is all about the network – not just in a technology sense (although that is crucial, too), but in the context of people and organisations. The technology gives us the power to connect with each other wherever we are, whatever we're doing, at any time of the day or night. It has fundamentally changed our ability to access and use information. But without considering the effects of this change holistically – and analysing how they interact with society – we are likely to get the management of change fundamentally wrong.

That's why the New World of Work is a crucially important concept for us all.



A world of change

The past 30 years have seen a dramatic shift in the developed world from agriculture and industrial manufacturing to a service-based economy, where the value of ideas, information, expertise and insight equals or exceeds that of goods. In the UK economy, for example, 85 percent of GDP is now derived from services. According to research conducted by Nottingham University, between 1950 and 2000, the proportion of the working population employed in services more than doubled. Manufacturing provided only 16 percent of employment in 2000 compared to nearly 40 percent in 1950.

Raw materials have been displaced by information as the key driver in many industries and occupations – and information has become a commodity. Much of the change in our economy has come from increasing global integration brought about by more widespread adoption of information and communication technology (ICT), and from the dramatic innovations created by sharing knowledge and opening up new markets.

As Peter Drucker explained in his 1999 book *Management Challenges for the 21st Century*, "It is certain that the emergence of the knowledge worker and of the knowledge worker's productivity as key questions will, within a very few decades, bring about fundamental changes in the structure and nature of THE ECONOMIC SYSTEM."¹ The capitals are his – the information age and the knowledge workforce, Drucker was saying, isn't just about companies changing. It's about everything changing.

Microsoft sees three primary factors shaping the workforce over the next ten to 15 years: increasing global integration, demographic change and technological innovation. Each of these factors poses its own challenges and opportunities for workers, employers and communities. Microsoft believes that with proper planning and appropriate investment in workforce development, society can exploit these developments to secure increased prosperity, higher productivity and economic security.

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What is the New World of Work?

Social, political, economic and demographic change is transforming global commerce, organisational structures and individual freedoms. Over the past 50 years, information technology (IT) has played a critical role both in creating the conditions for change and in helping organisations adapt to it. As we move towards a world that is more fluid, less centralised and less certain about old assumptions and old models, IT is evolving in ways that will empower organisations, teams and individuals to realise their potential in a New World of Work. More powerful software and computing systems, the Internet and pervasive wireless connectivity open the door to countless possibilities.

However, in celebrating the success of these advances, we should not forget that the ability to adapt and innovate is fundamentally a *human* talent. Empowering *people* to work more efficiently and effectively in this “digital workstyle” should be at the centre of any organisation’s strategy. In Microsoft’s vision for the New World of Work, people are the key to success. High-value workers produce high-value output and high-quality outcomes. By investing in the capabilities of people, by giving them the right skills and powerful tools, businesses enable them to achieve more as workers, as managers, as citizens, and as members of families and communities. People have proven, time and again, to be the most adaptive and responsive asset available to companies and to economies.



Keys to the New World of Work

Microsoft aims to enable organisations to respond to rapid change by empowering people with better ways to create, use, share and interpret information. In its analysis of emerging trends and implications – “the New World of Work” – Microsoft sees four primary dimensions of challenge and opportunity:

- **One world of business.** *Staying competitive in a fast-moving global market by empowering creative people to help organisations adapt quickly; and creating worldwide networks to build sustainable global businesses.*
- **Always on, always connected.** *Creating choices about when and where people work, but also allowing them to manage their communication and information in a world of ubiquitous, accessible data.*
- **Transparent organisations.** *Sharing information can not only improve operational performance and relationships within the supply chain and with society, but it also helps to reduce the need for costly and intrusive regulation.*
- **Workforce evolution.** *Learning to deal with a brand new blend of workers, including old and young; with new attitudes to society, work and technology; with new skills and desire for mobility – and allowing this blend to produce optimal results for the organisation.*

Britain and the Knowledge Economy

The challenges facing Britain in the 21st century are well documented. An aging population² is putting massive strain on the working public's ability to fund pensions and placing new pressure on an already-stressed healthcare system. The government and society need to promote better integration of immigrants and younger workers into high-skilled, high-value jobs over the next few years. And rivals in China and India are starting to compete for the service jobs that were, only a few years ago, considered the natural replacement for disappearing manufacturing roles.

There is also good news. Increased productivity can help offset the impact of changing demographics – and the UK is more entrepreneurial than most of its European neighbours. Research based on Eurostat and OECD figures shows that in 2005 the UK was third in the league table by proportion of employees in the knowledge economy (at 48 percent, behind Sweden and Denmark).³ But the high costs of regulatory compliance, a shortage of skilled workers and an uncertain socio-economic landscape remain huge challenges. Above all, it is crucial for businesses to adapt to the knowledge economy if they are to remain competitive.

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Factors shaping the evolution of the workforce

Globalisation

Global interconnectedness has been an aspiration of the human race for millennia, but only recently have politics and technology evolved to create a genuinely immediate global experience. Author Thomas Friedman dates the “flattening of the world” from the fall of the Berlin Wall in 1989, symbolising the demise of militant international opposition to neo-liberal capitalism. At the same time, end-user applications started emerge for the new high-speed networks capable of carrying unprecedented volumes of data effortlessly and instantaneously across vast distances. Satellite television feeds had put the world in our living rooms two decades earlier – but now the world was coming to our fingertips and democratising information.⁴

In other words, information and communication technology (ICT) had reached “escape velocity” at the exact moment when political barriers dissolved. Since then, the two forces have worked in tandem to bring more and more of the world’s markets and people into a single unified field of communication, information and commerce.

But the world is not flat – it is just better connected. In fact, the information revolution, which is itself uneven in its distribution, has made the connected populations acutely aware that wealth, capital, market power and management styles, trade policy and governance models are far from even. This is a lumpy world where some peoples and regions have been able to benefit more than others. Microsoft recognises that globalisation may not be politically sustainable unless its benefits are distributed more equitably. The failure of global economic integration would create significant costs and complexities for international businesses, not least for the UK which current boasts a £40bn trade surplus in knowledge services⁵ and where the globally-integrated financial services industry contributed £50bn to the UK economy in 2006.⁶

So it is critical that workers, businesses and governments be given the tools to adapt, not just to benefit the UK, but to support and enhance the UK’s role within this global community. A commitment to increasing globalisation should carry with it the willingness to invest in workforce development and creation of new opportunities for workers affected by changes in local economies.

Demographic change

The global workforce is aging at an unprecedented rate. Over the past 30 years, fertility rates around the world have fallen dramatically, while the average life expectancy has increased. A United Nations population study from 2002 shows that the number of people aged 65 and older will grow by 20.5 percent from 2005 to 2015, while the working-age population (aged between 20 and 64) will increase by only 13.8 percent.⁷

In the UK, birth rates have crept up recently. But that’s barely denting the trend: data from National Statistics (NS) show that in 2005 the average age of a Briton was 38.8 years, against 34.1 years in 1971. The percentage of people under age 16 fell from 25 percent in 1971 to 19 percent in mid-2005. Over the same period, the percentage aged 65 and over increased from 13 percent to 16 percent.⁸

The aging workforce raises several questions about the future of work. How will a shrinking labour pool be able to sustain economic growth? What changes to the workplace may be necessary to accommodate this demographic shift? Will the scarcity of qualified applicants (and the resulting higher costs of employment) hold down economic growth? Or can businesses make up for a shrinking workforce by increasing the productivity of their workers? And how can businesses adapt their structures, systems and cultures to create cohesive organisations that incorporate productive roles for older workers, migrant labour and women?

Technological innovation and the rise of information work

Information work is tightly linked with information and communication technology. ICT gives workers faster, less expensive and more effective ways to create everything from documents to polished multimedia presentations; instantaneous communication with colleagues around the world; access to information from disparate sources and systems; and visibility into complex processes that leads to greater understanding and better decision-making.

Because of these advantages, the use of ICT has spread from core “knowledge work” occupations such as analyst, editor and programmer into areas where knowledge of computers and technology was not previously required. Today, delivery drivers, postmen, builders and cab drivers all use sophisticated technology to undertake the same tasks they’ve always done, but more productively.

Organisations that develop new practices, decentralise decision-making and empower teams have achieved some of the best productivity gains from their ICT investments. Even in less knowledge-intensive sectors, the improvements are impressive. Manufacturing companies in the UK achieve an extra 2.2 percent in productivity for each additional 10 percent of employees using computers, according to data from NS. In newer firms, this extra productivity effect rises to 4.4 percent. Internet use is even more effective. Manufacturers see an extra 2.9 percent in productivity for each additional 10 percent of employees using the ‘net.⁹

However, this productivity gain has come at a cost. ICT requires workers to learn new skills and they need training to use software, communication and collaboration tools, regardless of whether these skills were intrinsically related to their actual occupation. For a generation, this overlay of technology has reshaped the expectations and perceptions of work by the existing workforce, often making it seem more complex, more demanding, and more stressful than it is. According to a recent survey of 400 UK SMEs, 42 percent said that they felt “left in the lurch” with new technology thanks to insufficient post-sales support or training.¹⁰ Good technology – ICT investments that will show visible returns – should be easier to learn and more straightforward to use.

So part of the burden of addressing these issues falls on technology companies. Products must be less intrusive, less complex, richer and more contextual – and Microsoft is committed to these goals. It is also necessary for employers and workers to recognise the changing nature of work. They must modify their expectations and practices in order to embrace new business relationships that reach beyond the boundaries of the local office and “the way we do things here” and out into relationships that span the globe.

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Challenges and opportunities in the New World of Work

Productivity vs innovation

Closing the productivity gap with other nations is a critical objective for UK businesses. But the solution to this issue isn't just to throw money at structured training and better processes. British businesses have come to understand that in the knowledge economy, creativity is the well-spring of true productivity. In a 2005 MORI poll, 67 percent of companies reported that they train managers to identify and develop new ideas, compared with just 20 percent in 2002.¹¹

Innovation alongside process excellence, is the focus for these forward-thinking companies and their people. Using new technologies and working practices to make people more effective and efficient is crucial – but those same attributes of the New World of Work should be empowering workers to create change. It is important that the wealth of information, the ability to create better, more finely tuned and lower level metrics, does not become such a distraction that disruptive events are missed, or creative new ideas dismissed because they don't fit current models or modes of thinking.

The power of transparency

The information revolution has allowed managers unprecedented visibility into what's happening at their organisations. At the same time, tougher regulations and corporate governance have required businesses to report more detail, and more accurately, than ever before. Microsoft believes that as transparency becomes increasingly critical to business success in the New World of Work, organisations will be better served by software that gives information workers greater control over how they operate.

Systems should help executives issue compliance reports without having to construct a rigid new infrastructure. Business users should have ever greater control of their own views into their data, while IT handles the required transparency for regulatory or performance management in the background. Businesses should have intuitive tools that allow them to interact with partners in their value chain – tools that can effortlessly adapt to new partners and new circumstances.

The power of the networked organisation

In the New World of Work, information is not only fluid, it *"is expected to be fluid"*. Ubiquitous networks create the expectation that organisations can and will share information with partners, suppliers, customers, investors and other stakeholders as a routine part of doing business. Detailed product information will be posted on a website, technical documentation will be available for download, e-mail addresses and other channels of communication will allow person-to-person contact, and critical business processes such as transactions, logistics and supply chain may be exposed via e-commerce sites and portals.

But that power to communicate and collaborate comes with a price attached: the need to protect data, information and intellectual property. The 2006 Information Security Breaches Survey (ISBS) found that 52 percent of businesses in the UK had a malicious or premeditated e-security incident during 2005. Large businesses (those with 250 or more employees) were especially likely to fall victim, with 84 percent suffering an incident in 2005.¹² Guarding against breaches of information security – and, in particular, safeguarding data to protect both corporate and individual rights – will be a crucial task in the networked world.

The power of complexity

Several factors are driving greater complexity in the New World of Work. One is the exponential growth in the sheer volume of data. According to a new IDC report, the digital universe measured 161 billion gigabytes in 2006 – more than three million times the information in all the books ever written. The study suggests digital information will occupy a staggering 988 billion gigabytes of storage space in 2010.¹³ Navigating this sea of information, largely devoid of context or priority, to find the right information for good decision making is increasingly tough. Tools that make sense of terabytes of data have at least as much value to organisations as tools that enable the creation, storage and recall of that data.

Other complexity factors include the increasing transparency of work practices (involving constant scrutiny, review and refinement of what people are doing) and more open, collaborative businesses (creating new connections and dependencies within and outside organisations). Simpler, more intuitive tools for information work that bury complexity and integrate individual work more seamlessly into an organisational context would help relieve some of this burden.

Data security in the era of openness

Network-level security (such as firewalls, virus protection and anti-spam filters) has long been the first (and sometimes only) line of defence for proprietary data. But as interconnectivity blossoms, organisations find themselves having to open more and more holes in their perimeter fence to permit access.

Document-level security via information rights management (IRM) systems gives organisations control over who is permitted to read, modify, print or redistribute individual documents, even after they filter out beyond the firewall. As the technology evolves, Microsoft sees this sort of IRM becoming even more precise, allowing users and administrators to designate role-based permissions on content down to the level of individual sections or words in documents, spreadsheet cells, slides in a presentation, or contact/presence information in an e-mail header.



Opportunities for business

Focus on human capabilities. Businesses should invest not simply in new systems, but in capabilities that amplify the skills and impact of people in all roles and activities. Collaboration, for example, allows individual expertise and experience to create greater value through networking, knowledge sharing and rapid refinement of new ideas into products, services, intellectual property and insights. This shift from pure process to creativity is already taking place. In 2006, a Demos-sponsored GfK NOP survey asked HR directors of FTSE 200 companies what the most important skills and qualities would be for graduate recruits in ten years' time. "Creativity and innovation" ranked highest – above literacy, numeracy, IT capability, communication skills, problem-solving and multitasking.¹⁴

Think strategically about the workforce.

People are an asset to an organisation, not a cost. Organisations must recognise that diversity in the workforce in terms of background, gender and age is now a major plus. Older workers can impart leadership skills and experience; younger workers tend to foster a culture of collaboration, flexibility and change – although there are plenty of young leaders and collaborative older workers, of course. A more creative, strategic view of the workforce may also drive policies and practices that help retain key workers in an unpredictable labour market.

Adopt a culture of corporate responsibility.

There is no certainty that economic integration will continue to enjoy the political support of national governments if globalisation is perceived to do more harm than good.

A collapse of the international consensus on trade liberalisation and economic integration would be catastrophic for global economic development and would dramatically increase complexity for businesses. At home, regulation remains a huge cost to business. By taking corporate responsibility into the very heart of the organisation, companies can head off calls for tighter control that would increase those costs still further. And there's a positive effect, too, in terms of recruitment and retention. In a recent Demos survey, 48 percent of business leaders expected employees to increasingly ask to be involved in corporate social responsibility (CSR) activities. In companies with over 500 employees, that rose to 76 percent.¹⁵

The New World of Work, then, is the central battleground in the war for talent. Microsoft sees two promising strategies for employers competing for these skilled and increasingly important knowledge workers: make your organisation independent of time and place; and prepare for the new face of the workforce.



Becoming independent of time and place

The emergence of global high-speed information networks has made the physical location of certain kinds of businesses largely irrelevant. People can access the tools and data that they need for work anywhere, anytime. Collaborative software, virtual meetings, affordable videoconferencing, instant messaging – they're all in use today, and many of these technologies are now available on mobile devices.

With 80 percent of internet connections in the UK now broadband-enabled (at the end of 2003, it was just 25 percent),¹⁶ home workers are just as hooked into corporate systems such as email as they would be sitting in the office. In London, over 12 percent of workers operate remotely at least some of the time – even at this early stage of the broadband revolution, that figure is growing at 0.5 percent a year. And according to research conducted by TGI, 16 percent of people used a home computer to do work brought back from the office in 2006 (compared to just nine percent in 1996) and 47 percent checked work email from home (just two percent in 1996).¹⁷

As collaboration technology matures and evolves, it will allow work to become more easily accessible to these dispersed employees. Current issues of access, quality of service, security, privacy, inter-organisational collaboration and standards are likely to be resolved, removing the remaining barriers that have historically rooted organisations to physical locations.

Companies are now able to make use of the comparatively low costs and usable skills of information workers in emerging economies to provide more extensive and more valuable services for their business. ICT has made outsourcing and offshoring possible, but it has also allowed employers to become more flexible in the kinds of work arrangements available to workers. Flexi-time, part-time employment, telecommuting, mobile

access and virtual teaming have given workers unprecedented control over how they balance their work life and personal commitments.

According to research commissioned by the DTI in 2006, 90 percent of employees say they have at least one flexible work option open to them; 56 percent say that they have worked flexibly in the last 12 months. Nearly half of employees who had flexitime available to them made use of it, and 44 percent who were able to work regularly from home did so.¹⁸ Flexible work arrangements mean that organisations may find less need for extensive physical facilities, essentially outsourcing (at least in part) the costs of office space and infrastructure to workers.

Certain types of work will always require centralised facilities (such as retailing and manufacturing plants). And many businesses will find that workers only spend some time out of the office, meaning they need to reconfigure workspaces with hotdesks, meeting rooms and social areas rather than simply ditch offices altogether. Teamwork – which benefits hugely from at least some face-to-face interaction, no matter how effective the collaborative systems in place – remains a fundamental aspect of the New World of Work. But many companies are already seeing huge benefits from creating “place independent” workers.

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Opportunities for business (continued)

All 1,000 reservations agents for US airline jetBlue are home-based, for example. Staff turnover is low (just 3.5 percent of its agents leave each year) and the company receives only one complaint per 300,000 passengers for customer service problems – a third of the rate for the larger US airline carriers.¹⁹

Closer to home, Tesco is another example of a company focusing on people and productivity, as well as goods and services. People are at the centre of the retail industry perhaps more than any other sector. This starts with the consumer, but also encompasses employees, partners and suppliers. The competition in the retail sector also ensures that delivering ever more competitive and innovative products and services to market is critical to continued success.

In an article written for the Economist late in 2005, Terry Leahy CEO of Tesco, summed up the need to meet consumers demands: “consumers with busy lives will increasingly want simple choices. If people are feeling stressed, we need to make life easier for them, not add to the pressure by giving them ever more decisions to make. Opportunities for growth are going to come from saving time for people and making things simpler.”

One way of Tesco achieving this simplicity was to enhance and improve the productivity of its home delivery systems. A Pocket PC and wireless system was developed to better assist shelf pickers and drivers in their day-to-day roles, greatly improving the accuracy and productivity of the home delivery service. While the system improved processes it also helped the people on the ground perform a better job and thereby improved the service offered to Tesco’s home delivery customer base.²⁰

But companies don’t need to be that large or technologically radical to see benefits. According to the Microsoft Free Range Business report, any flexible working initiative is likely to improve morale, boost productivity and reduce employee absenteeism.

Microsoft encourages businesses to consider the possibilities, not just in terms of the ability to move jobs to lower-cost labour markets but also to soften the boundaries between work and life for workers under increasing pressure to balance child-rearing, care of elderly parents, and the complexities of everyday living. Introducing flexible work can not only be an attractive benefit, it can increase the reach of organisations competing for talent on a worldwide scale.

Prepare for the new face of the workforce

Older employees leaving the workforce often take with them irreplaceable skills, experience and institutional knowledge. At the same time, the generations born after 1980 are just beginning to arrive on the scene. This “millennial” group – often called “Generation Y” – comes with unprecedented familiarity with technology. Because of social forces and the ever more strained relationship between their parents and their employers, the Millennials come to the workplace with very different attributes about work. They expect the organisations they work for to be less hierarchical, more open and more ethical.

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And while it seems remarkable to be discussing gender politics more than 30 years after the original Sex Discrimination Act, the issue of women in the workplace has never been more acute. Women are starting to outpace men in educational attainment. Candidates for the high-value information work jobs of the future are therefore increasingly likely to be female. But today's workplace, while more equitable by historical standards, remains the product of a largely male-centric view of management practices. So how do these three groups shape the New World of Work?

The value of experience

In its latest projections, National Statistics indicates that nearly a third of the labour force will be over 50 by 2020. But many employers are not prepared for the realities of an older workforce, despite the strict new laws on age discrimination that have come into force over the past five years. According to the Third Age Employment Network, six out of ten people under the age of 50 who are made redundant get back into work within a year, but only one in ten people over the age of 50 find work in the same time-frame.²¹

Organisations can benefit greatly by taking advantage of the skills, experience and motivation of workers near or beyond traditional retirement age. Some of the skills' barriers to their involvement also seem to be disappearing. Surfing the Internet has overtaken more traditional pastimes such as DIY and gardening, according to a survey of English pensioners' behaviour by insurer AXA, with 41 percent of retirees regularly going online.²²

As software becomes more intuitive and better able to harness the knowledge and experience of these older workers, there are fewer reasons to exclude them from a modern workforce defined by an ability to manage information, not physical labour which was the traditional bar to extended worklife. And with longer life comes a greater financial burden, motivating older workers to remain economically active.

Generation Y

The millennial generation born after 1980 has grown up surrounded by digital interactive media – video games, the Internet, instant messaging and a plethora of entertainment options. The YouGov Mobile Life survey showed that 51 percent of 10 year olds and 70 percent of 11 year olds already own a mobile phone.²³ They're bringing that familiarity with technology into the workplace.

For the most talented and productive new workers, constant access to information and colleagues is a baseline assumption. YouGov polled office workers aged between 18 and 29 and found that 71 percent of them access Web 2.0-type internet sites (such as YouTube or MySpace) at least a few times a week and 39 percent of them access them several times a day. Six out of ten of them believed that they should be entitled to access social networking sites from their work computer for personal reasons, compared to just 38 percent of employees aged over 30.²⁴

So while they demonstrate technological sophistication, "street smarts," a penchant for collaboration, and positive aspirations in the workplace, they also see fewer hard demarcations between work and social life and may require greater supervision and positive reinforcement by management. Organisations can harness the enthusiasm and fresh thinking of younger workers by making investments in ICT systems and practices that align with their high level of skills and expectations.

Opportunities for business (continued)

Women-friendly workplaces

At the beginning of the 20th century, around five million women worked in the UK, 29 percent of the total workforce. By 2000 the figure had risen to 13 million – 46 percent of workers.²⁵ The Department for Work and Pensions has forecast that the UK workforce will grow by 300,000 between 2004 to 2010 – and 80 percent of that growth will be women. By 2010, it claims, one in five UK workers will be mothers.²⁶ Unfortunately, many organisations have failed to find a fair way of bringing mothers back into work. According to a 2006 report by the Institute for Fiscal Studies, before they have children, the average hourly wage for female workers is 91% of the male average – but it declines to 67% for working mothers juggling jobs and childcare.²⁷

Naturally the New World of Work will need to reflect the priorities and responsibilities of women. But the real breakthrough will come when there is true family flexibility – and any economically active member of the household can balance their work commitments with those to their home. For example, companies cannot afford to create a situation where it's harder for skilled women to get back to work because their partners have less flexibility to provide childcare.

In any case, the increasingly collaborative and global nature of the New World of Work will also increase demand for a diversity of backgrounds and skills in every organisation. Corporate monocultures are not only negative for those who work within them – they also weaken the organisation's ability to adapt, innovate, grow and communicate.

The thinking business

Companies that allow themselves to stand still in the face of all these demographic, economic, technological and environmental changes could be causing trouble for themselves. The only way to survive in this rapidly shifting environment is by becoming more flexible and focused on outputs – survival means being excellent, in other words. There is no middle ground.

Gartner has defined what it calls the High Performance Workplace as: "A physical or virtual environment designed to make workers as effective as possible in supporting business goals and providing value. A high-performance workplace results from continually balancing investment in people, process, physical environment and technology, to measurably enhance the ability of workers to learn, discover, innovate, team and lead, and to achieve efficiency and financial benefit."

Investing solely in technology, for example, is a mistake – in this New World of Work, no amount of process automation will protect you from lack of creativity. And as McKinsey's 21st Century Organisation project has stressed, it is people, not processes or systems, that drive innovation. So it's no longer a question of just doing business well. Companies have to think business, too.



Opportunities for workers

Outsourcing and automation have been concerns for workers since at least the beginning of the 20th century. And innovation often makes existing paradigms obsolete. Microsoft is a strong advocate of innovation but is very well aware that, for those caught in the teeth of rapid change, the promise of future benefits can be a poor substitute for the pains of adjustment in the here and now. Microsoft believes that workers are full partners in economic progress and that their legitimate concerns about earning power, job security, work practices and continued opportunities must be addressed. Microsoft believes that empowered people, along with flexible tools that help them amplify their capabilities are the best approach to navigating through uncertain futures.

New challenges for information workers

Thanks to globalisation and lower-cost ICT, the traditional advantages of developed countries in service industries are diffusing. Emerging economies in India, China, Eastern Europe and elsewhere are now competing even in skilled information and service work. Yesterday it was manufacturing jobs; today, software development and customer services are just as likely to be outsourced to emerging economies. Other traditional information-work tasks are vanishing altogether as increasingly sophisticated IT systems automate or simplify tasks. So information workers here need to make sure they can deliver value to their organisations in a way that differentiates them within the wider talent market.

But those same forces are creating opportunities for worker empowerment, too. An information worker in Sheffield can now offer their services in the same global market as one in San Diego or Silivassa or Shanghai. And new smarter, simpler ICT will reduce, then reverse, the 30-year trend that has required workers to learn general software skills in addition to occupational competencies. More intelligent software will help us deal with "information overload". High-value workers will depend less on narrow technical ability and more on universal human qualities such as insight, persuasiveness, wisdom, passion, craft and physical presence.

Balancing work and life

For workers, greater flexibility in when and where they do their work provides the freedom to balance the demands of their jobs and lives in ways that make both more rewarding and productive. In the DTI work/life balance survey, 94 percent of workers agreed that "people work best when they can balance their work and other aspects of their lives" and 89 percent of workers agreed that "having more choice in working arrangements improves workplace morale". While businesses need that extra productivity, workers also face new pressures on their time. For example, the DWP estimates that by 2010, ten million Britons will be caring for an elderly relative, and 25 percent of families will be single-parent homes.

Hesitancy to accept promotions and a general willingness to give up pay and benefits for time is not unique to Millennials, but is increasingly the attitude of working executives as well. As the always on, always connected world develops, it will create greater freedom for individuals to make the choice and where and when they work. And in a global talent pool, that choice may not be a domestic one. People will look for organisations that permit them the choices necessary to balance work and life by negotiating commitments based on quality outcomes, not on time spent in the office.

The same remote access and mobility technology that enables employers to outsource projects allows workers to seek employment opportunities anywhere, on any schedule. Workers will be able to offer their skills out to the highest bidder without being limited by where they live. While the habits of telecommuting and freelancing require more discipline, new technology also allows employers to provide higher levels of direction and supervision over remote workers. And if employers are more confident in that level of control, more workers who are committed to their families and communities can remain productively employed.

Microsoft's commitment

Microsoft is unusual among global corporations in that its success depends on the increasing sophistication of its customers and the markets in which they operate. Education, economic development and the intensive use of software and technology to improve life and work aren't just central to the company's business interests, but also to its business values. Microsoft citizenship initiatives are long-term, locally focused investments that support government objectives such as education, workforce development, digital inclusion and building the local software economy. Microsoft works with governments, educators, experts and local partners to create opportunities for citizens and local businesses.

Technology vision

Microsoft's technology vision is to develop and deliver software that puts people at the centre of business success. Microsoft believes that by empowering people with better ways to create, share and understand information, people, businesses and communities will be better able to turn emerging demographic, economic, political and social trends from challenges into opportunities. The alternative approach – investing heavily in rigid systems and processes – turns people into replaceable parts and reduces the value of many organisational roles, setting the stage for widespread commoditisation.

Education and skills

Through Partners in Learning, Microsoft is working together with schools, teachers, the government and partners from the education community to help give today's children the best possible start in life and prepare them for the New World of Work. With the Scottish Qualifications Authority, the Teacher Training Agency, the National Assembly for Wales and Futurelab, Partners in Learning seeks to embed digital literacy and knowledge economy values deep into the educational curriculum so that young people will graduate not just with skills, but with an orientation toward information and lifelong learning.

Microsoft also supports the goals of governments to invest in workforce development, giving people the skills necessary for higher-paid, higher-value work. Microsoft IT Academy is a skills program designed to increase the concentration of IT skills within local job markets to provide high-value opportunities for people and businesses.

Digital inclusion

Because the digital, connected, globalised world remains "lumpy" Microsoft is committed to helping its customers navigate the New World of Work by creating software that helps people conduct their work with flexibility and agility driven by the needs of their organisation, their customers and their partners. For example, the Local Language Programme promotes digital inclusion for people of all cultures, regions, locales and languages by providing access and improving connectivity, as well as promoting communication and interaction. Microsoft has invested in packs that remove the language barriers to Microsoft technology and enable diverse linguistic communities access to it as a platform for the development of useful applications for their people.

Conclusion

The future is always uncertain, but in this report we have seen some of the themes that will shape tomorrow's workplaces and economies. Microsoft believes that investing in the development of empowered information workers offers win-win answers to many of these challenges. It will prepare workers for higher-value, higher-reward occupations; it will provide businesses with the talent they need to innovate and compete; and it will provide governments with the heightened productivity necessary to promote economic growth. The key steps are:

- **Technology to empower workers**, especially the high-value information workers whose creativity and ideas lead to the most dramatic innovations.
- **Lifelong learning**, starting with an education that centres on an ability to adapt to change and manage any information. We should ensure that current and future workers have the skills, context and judgment to use information effectively.
- **Cross-generational workplaces**, to incorporate the wisdom and experience of older workers along with the new ideas and approaches of the emerging generation.
- **Equitable workplaces**, where technology and management practices support productive, mutually beneficial collaboration among workers, management and owners.
- **Workforce mobility** and decentralisation, to capture the wasted resources consumed by commuting and enable workers and organisations to operate flexibly.
- **Strong, vibrant communities** with the physical, educational, environmental, information and cultural infrastructure to nurture creative, productive and engaged individuals and families.

Deployed effectively, these investments can make the transition to the more global, interconnected New World of Work smoother, and spread the benefits more broadly. They can diffuse the tensions associated with globalisation, demographic change and technological innovation and help push the global economy toward a sustainable era of growth and prosperity.



Yesterday it was manufacturing jobs; today, software development and customer services are just as likely to be outsourced to emerging economies.

Endnotes

1. Management Challenges for the 21st Century, by Peter F. Drucker, Collins, ISBN-10: 0887309984
2. National Statistics, www.statistics.gov.uk/cci/nugget.asp?ID=949
3. "The knowledge economy in Europe", a paper written by Ian Brinkley and Neil Lee and presented to the 2007 EU Spring Council by The Work Foundation, www.theworkfoundation.com/products/publications/azpublications/knowledgeeconomyineurope.aspx
4. "The World is Flat" by Thomas L Friedman, Farrar, Straus and Giroux, ISBN 0-374-29288-4
5. "Trading in Ideas and Knowledge" by Ian Brinkley, a Work Foundation report. Its figures are based on a methodology used by Bob Rowthorne and Ken Coutts for submissions to the Science and Technology Council and exclude transport and travel services. They show that in 2005, the UK exported about £75bn in knowledge services and imported about £35bn – a £40bn surplus, or about 3.3 per cent of GDP. See www.theworkfoundation.com/Assets/PDFs/ke_trading.pdf
6. British Bankers Association Focus on Finance, June 2007, www.bba.org.uk/content/1/c4/96/51/Focus_on_Finance.pdf
7. NWOW stat
8. National Statistics, www.statistics.gov.uk/cci/nugget.asp?ID=949
9. National Statistics, www.statistics.gov.uk/CCI/nugget.asp?ID=1240
10. "Digital Start-up" research was conducted by Vanson Bourne among non-technology-centric businesses sized between 10 and 250 employees for Cisco, download at <http://snipurl.com/m3jr>
11. "The Innovation Survey", carried out on behalf of the CBI and QinetiQ, <http://snipr.com/1nrmd>
12. Managed by PwC on behalf of the Department for Trade and Industry, <http://snipr.com/isbs2006>
13. IDC research sponsored by EMC, available at www.emc.com/about/destination/digital_universe/
14. GfK NOP research sponsored by Manpower UK, available at www.manpower.co.uk/news/HR_Priorities_2007.asp
15. Part of the Disorganisation project, sponsored by Demos and Orange, www.demos.co.uk/media/pressreleases/disorganisation
16. National Statistics, first release: "Internet Connectivity, March 2007", <http://www.statistics.gov.uk/pdfdir/intc0507.pdf>
17. TGI GB surveys 1996, 2002, 2004, 2006 (cited in The Orange Future Enterprise Coalition report, "The Way to Work", <http://snipr.com/ofecwork>)
18. "Work/life balance survey", published in March 2007, www.dti.gov.uk/files/file321116.pdf
19. Guardian Unlimited, October 2005, <http://money.guardian.co.uk/work/story/0,1456,1592547,00.html>
20. <http://www.microsoft.com/casestudies/casestudy.aspx?casestudyid=51378>
21. See www.taen.org.uk - for a collection of stats on age and employment, see www.taen.org.uk/Publications/Key%20Facts%20Age%20Demographics%20Employment%201-07.pdf
22. Data from from AXA's Global Retirement Scope 2007, www.axa.co.uk/media/pressreleases/2007/pr20070202_1100.html
23. Mobile Life Youth Report, September 2006: www.yougov.com/archives/pdf/CPW060101004_2.pdf
24. YouGov survey, sponsored by Clearswift, released March 2007, www.clearswift.com/news/item.aspx?ID=1095
25. National Statistics, www.statistics.gov.uk/articles/labour_market_trends/century_labour_market_change_mar2003.pdf
26. "Britain in 2010", Department of Work and Pensions, 2001.
27. "New-borns and new schools", IFS publications, www.ifs.org.uk/conferences/newborns.pdf

www.microsoft.com/uk/peopleready

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