

Managing Change in Europe

Practical Recommendations
for Business and Policy-makers

A Report by Chatham House
and the Pendo group



CHATHAM HOUSE



the Pendo group

helping Europe manage change



The Pendo group represents the leading business and technology consulting and outsourcing firms in Europe. Its members are Accenture, Capgemini, Deloitte, IBM, Management Consulting Group PLC and PwC. It is an entity of FEACO, the European Federation of Management Consultancies Associations.

The group aims to help develop a more dynamic, innovative and competitive Europe on the world stage by offering insights and practical examples on how Europe can facilitate and implement change – a key political and economic issue as Europe seeks to respond to the challenges of globalization and demographic ageing. Pendo group member companies have a unique understanding of the challenges organisations face when implementing reform as well as first-hand practical experience of how to assist those organisations in their change programmes. Our mission is to establish a dialogue with policymakers and business leaders and to be a resource for them as they seek to implement change. The Pendo group's website is: <http://www.thependogroup.eu>



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ABOUT THE PENDO GROUP AND CHATHAM HOUSE

Both as significant employers and as consultants to major companies and public-sector organizations, Pendo group member companies have a unique understanding of the challenges organizations face when implementing reform as well as first-hand practical experience of how to assist those organizations in their change programmes. The Pendo group is a valuable resource on which European and national policy-makers and business leaders can draw for concrete ideas about how to manage change. The group's mission is to establish a two-way dialogue with them to provide new insights into how change can be managed successfully as well as how policy levers can impact on that process.

Chatham House is one of the world's leading organizations for the analysis of international issues. It is membership-based and aims to help individuals and organizations to be at the forefront of developments in an ever-changing and increasingly complex world.

This report is the outcome of the collaboration between the Pendo group and Chatham House and draws from both organizations' long and unique engagement with European economic and political issues. It is based on a carefully structured process of analysis and an original combination of desk research, case studies drawn from the Pendo group's extensive knowledge of managing change and consultations with Europe's key policy-makers, business leaders, NGOs, trade unions and educationalists, scholars and commentators. Through a series of three workshops held in London between December 2006 and February 2007, the partnership between Chatham House and the Pendo group has fostered a unique dialogue between all stakeholders involved in managing change in Europe, which we hope will continue.

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EXECUTIVE SUMMARY: CHANGING EUROPE IN A CHANGING WORLD

Europe has the vision and potential for sustained economic growth but needs to deploy its assets and resources and new tools to fully realize this vision. By not taking hard decisions now, Europe is putting at risk the opportunity to create more growth and jobs in the future.

Europe's economic performance can be improved by boosting productivity. This is core to a 'vibrant' economy and is all about the 'quality' of production factors. Focusing on enhancing skills and making the workforce more flexible and adaptable is key to boosting productivity. Equally important is to provide a flexible and innovative environment where the 'quality' workforce can operate, as well as innovative tools.

To enhance Europe's human capital and create the conditions in which it can be most productive, and to foster innovation and adaptable organizations, it is crucial to align all different stakeholders – businesses, policy-makers, public-sector leaders, educationalists and individual employees – in the common vision of change. Just as important, however, is the means of executing that vision.

This report, derived from the Pendo group's extensive knowledge of managing change and Chatham House's experience of policy-oriented research, offers a number of practical recommendations on how such change can be implemented. The report concentrates on three interdependent drivers of effective and meaningful change: human capital, organizational flexibility and innovation. In each of these areas it identifies imperatives, and strategies for their implementation. The recommendations are designed to be impactful and practical.

In order to redefine human capital, the report argues the need to:

- employ advanced technology solutions to enable more people to join the active workforce;
- create platforms for 'just in time' rather than 'just in case' training;
- utilize 'skills tagging' to match demand and supply in the labour market;
- outsource key educational initiatives – particularly Information and Communication Technologies (ICT) – to business partners.

To foster adaptive organizations the report suggests it is essential to:

- lower their 'centre of gravity';
- develop communication that inspires the 'internal electorate' to vote for change;
- provide incentives that trigger a self-motivated and resilient workforce;
- remove regulatory barriers to organizational change.

As innovation is key to productivity, the report emphasizes the need to:

- foster and optimize innovation clusters;
- exploit e-government as a catalyst for economic growth;
- create organizations that 'incubate' new thinking;
- use public-service procurement to drive innovation;
- create a new discipline of 'Service Science'.

INTRODUCTION

Europe shows signs of emerging from a prolonged period of economic torpor. This new burst of activity, however, should not allay concerns about future development. Comfortable living standards and the recent upturn in growth and jobs promote complacency about the need for change within the EU, especially given the political difficulties that surround new initiatives. Yet this is the critical period in which to act. By taking hard decisions now, Europe will realize opportunities for growth in the future.

To maintain and accelerate current levels of growth, new approaches to skills development, organizational flexibility and innovation are essential. Despite currently buoyant export growth and a strong position in world markets, there is still concern that productivity and competitiveness may be lagging behind that of trade partners such as the US, especially in leading-edge sectors and in business organization, owing to a combination of inadequate investment in human capital, insufficient research and development and the limited ability of EU enterprises to adapt and innovate.¹ Clearly, also, some sectors of European industry are being squeezed out by highly cost-competitive emerging market economies, especially China.

The effects of a failure to implement and manage change are not yet felt by all parts of the economy, but some sectors are already beginning to experience the painful effects of structural adjustment. Europe's comparative advantage, its unrivalled history of innovation and the reliability of its legal systems can be exploited by emphasizing its technological strengths and ability to compete in products and services with high knowledge content. These factors all help to offset high labour costs but there needs to be an ongoing effort to maintain and improve adaptability in labour markets and in organizational structures as part of the overall strategy to remain competitive.

Within Europe, there exists a significant competitiveness gap between member states' economies – and this may be widening.² Without properly managed change across the EU, such disparities may grow, undermining Europe's efforts to sustain prosperity and growth across the single market.

In our view and experience, while the EU is concerned to address the key issues regarding future growth and development, execution has been far less convincing. In large part we believe this is due to a persistent lack of alignment between different stakeholders – businesses, policy-makers, public-sector leaders and individual employees. There will always be a degree of tension between these interests. Europe needs to discover how that tension can become more creative and productive.

¹ European Commission (2005c).

² European Competitiveness Index (2006).

1 REDEFINING EUROPE'S HUMAN CAPITAL

If urgent action is not taken, Europe could be caught between two powerful trends: the contraction in the size of the working population owing to ageing, and a dramatic shortfall of relevant skills for the new economy. Europe's working population (15–64 years) is set to fall from 67% of total population in 2004 to 57% by 2050. At the same time, the proportion of elderly people (65+) is expected to double from 16% in 2004 to 30% in 2050, an increase of approximately 60 million people.³

The growth opportunities in Europe place a premium on the ability to commercialize ideas. Knowledge-based skills – specifically Information and Communication Technologies (ICT) and analytical abilities – are critical. In a global context emerging economies such as China and India no longer seek to compete on price alone but in highly skilled and value-added activities. Unemployment in the EU is currently more than twice as high for unskilled workers as for workers with tertiary education; and 82% of Europe's highly skilled have jobs, compared with only 46% of lower-skilled workers.⁴ Germany has an ongoing shortage of 22,000 engineers.⁵ If Europe is to maintain a source of competitive advantage in the knowledge economy, managing change in human capital is crucial.

The pace of change is such that within this new economy it will be increasingly rare for any individual to spend his or her working life with the same company, institution or department. With relocation also becoming more necessary, portability of skills and qualifications not only across companies and industries but also across countries becomes increasingly relevant. Given its unique make-up, to manage such change successfully Europe needs a workforce that is both more resilient and more flexible.

Stakeholders in meeting this European challenge include policy-makers, business leaders, educational establishments and individuals. They have a shared responsibility to create this human capital. In particular:

- Policy-makers must urgently look to new ways of increasing the size of the employable, skilled population in order to offset the changing demographics.
- Business leaders must be more imaginative and flexible in their approach to training and skilling their employees.
- Schools and universities play a key role in developing the next generation workforce; they must overcome their resistance to employers as stakeholders.
- Individual workers must take responsibility for their personal skills development – putting an emphasis on new types of skills acquired on a flexible basis and regeneration of skills through lifelong learning.

Above all, each party needs to recognize its interdependence and shared interest in adapting the European workforce to the fast-changing world.

³ Eurostat news release 48/2005, 8 April 2005, <http://epp.eurostat.ec.europa.eu/portal>.

⁴ OECD statistics, <http://stats.oecd.org>.

⁵ Grose (2007).

1.1 Developing the new workforce

With some of the major Eurozone economies – primarily Germany and Italy – now emerging from a prolonged period of weak growth, unemployment is edging down. This is increasing the emphasis on improving skills to bring the unemployed back into work. As the demographic profile leads to a sharp decline in the working-age population, all of Europe will need to encourage higher participation rates in order to boost labour supply. Population ageing and the need for a radical reform of the pensions systems may also provide incentives to train older workers⁶ as well as women – for whom the average rate of employment in the EU is just 56%.⁷

Improving access to the labour market has to be a fundamental policy concern for European governments. The marked divergence in economic performance across Europe has already resulted in differently focused policy and training priorities. For countries with low unemployment – such as Denmark and the UK – the main policy concern is to raise labour market participation rates by encouraging more workers into the labour force. For countries with high unemployment, the priority is job creation.

Experience shows that micro interventions, that are individually tailored and aimed at providing incentives for more people to join the labour force, work better than macro policies, especially in the case of ‘hard to help’ groups. Coaching individuals, for instance, to develop communication and interpersonal skills as well as confidence is a small but critical step towards their becoming more employable.⁸

The ‘welfare-to-work’ services are an area where public/private partnerships can deliver tangible results. In the UK, for instance, private-sector agencies have been able to contribute directly to the success of groups of unemployed (or non-employed) workers in finding jobs; the agencies have the incentive of earning a profit for themselves in the process.

Learning from Best Business Practices: Working Links

In 2000, the UK government launched an Employment Zone (EZ) initiative. Within each zone, a private-sector agency took responsibility for helping a group of long-term unemployed to find jobs. The agencies were made responsible for paying unemployment benefits, funding training and supporting individuals’ other needs, such as providing appropriate clothes or vehicles. Although the system was complex, the principle was that the private agent would make a profit if it could place its ‘clients’ in sustainable jobs more quickly than was typical. If not, the agency would make a loss. On the whole Working Links has been phenomenally successful. In the past four years, the organization has found jobs for 40,000 people who had previously been unemployed and claiming Jobseeker’s Allowance for more than 18 months.

⁶ National social security programmes are already moving in that direction so that the retirement age is being progressively lifted to 65 years in almost all EU countries. The average exit age from the labour force in the EU-25 is 61.4 years (2005) but the prospect is that more workers will be actually remain in the labour market beyond this age. This will also make training for older workers (e.g. in the 55-60 bracket) more economically viable.

⁷ Eurostat. The figures for the EU are for 2005. The provisional employment rate for the EU in 2006 is 57.1%. <http://epp.eurostat.ec.europa.eu>.

⁸ OECD (2004).

The success of such schemes depends on political willingness to use private-sector suppliers to work alongside those people already tasked with this role within the public-service sector. This may mean offering valuable contracts to private suppliers to achieve key objectives such as moving poor and disadvantaged people off benefits and into employment. In exchange for these contracts, private suppliers may be more flexible and better able to take risks in helping people to identify their strengths, search for job opportunities and gain access to training, transport or any other help they might need.

The need for flexible working

If the pool of Europe's skilled labour is to be increased, it is crucial for policy-makers and business leaders to encourage flexible working patterns and to exploit the opportunities offered by technology, for example in teleworking. Given modern lifestyles, people are now more likely to go in and out of the job market, voluntarily or not, in response to market conditions. They are also more likely than in the past to prefer flexible working arrangements in order to combine work and education, or work and family. As a result there is an increasing demand for alternatives to the traditional full-time employment contract. Part-time job contracts in the original EU edged up to 20.9% of total employment in 2006, from 17.3% in 1998.⁹ Furthermore, the number of contracts of limited duration including seasonal employment, as well as of people engaged by an agency and those with specific training contracts, rose by about 25% between 1998 and 2006.¹⁰

This situation should be perceived as an opportunity for individuals, firms and public employers. The examples of Scandinavian countries and the Netherlands prove that this is both a practical and an economically effective course. In childcare provision, however, Europe shows a patchy picture, with countries such as Italy and Greece providing childcare for about 7% of total children of under the age of three, as opposed to over 30% for Denmark, Finland and Sweden.¹¹ Within the EU, current pension schemes in many countries still favour early retirement and discourage participation in part-time employment. Although in a number of countries the statutory retirement age is 65, in others it is lower. As a result, as noted above, the average retirement age in Europe is 61.4 years.¹²

Technology, supported by appropriate training, can help provide the flexible working patterns that would keep the ageing population in work. In addition technology – for example, voice recognition software for the visually impaired – can be used to bring disabled groups into the workforce.

Being adaptable to respond to market conditions and lifestyle choices also means gaining more 'portable' skills, competencies and entitlements. Cross-border issues within Europe also continue to hamper adaptability. One crucial condition for achieving a more flexible and more mobile labour force is through the universal recognition of qualifications and the portability of social benefits and insurance. Pension rights and other benefits have to be accrued and enjoyed even when the individual is working and living in another country. These initiatives do not imply costly programmes but they do require policy action and possibly legislation or deregulation. Some progress has already been made in this area within the EU. The Services Directive, finally approved in December 2006, aims to create a single financial market for occupational pension funds. More must be done.

⁹ Eurostat, 'Persons employed part-time (annual average), % of total employment', <http://epp.eurostat.ec.europa.eu/portal>.

¹⁰ Eurostat, 'Employees with a contract of limited duration (annual average)', <http://epp.eurostat.ec.europa.eu/portal>.

¹¹ OECD Family Database, Social Policy Division, Directorate of Employment, Labour and Social Affairs, www.oecd.org.

¹² Eurostat, <http://epp.eurostat.ec.europa.eu/portal>.

Developing the European workforce: imperatives for policy-makers

- Develop public/private partnerships that provide underserved populations with the opportunity to develop relevant skills and place them with organizations in need of those competencies (e.g. Working Links programme).
- Explore ways of increasing funding for child/elderly care programmes that enable women to take a more active role in the workforce.
- Provide pension flexibility to allow employees to take part-time roles without penalizing their final pension amounts.
- Provide technologies that enable older workers/workers with disabilities to remain in the workforce.
- Consider application of a points system to encourage immigration of workers with specific skills.
- Adopt EU legislative framework for intra-corporate transferees which enables the rapid deployment of employees to the required location.

1.2 Skilling the European workforce

European economies are fast approaching the point where knowledge-based industries will generate more than half of GDP and total employment.¹³ Human capital is the key component of value in these companies. However, the evidence suggests that Europe is failing to keep up with the demand for skills driven by the knowledge economy. It is estimated, for example, that the number of people needed to fill the advanced technology skills gap in Europe was 160,000 in 2005 and will have risen to 500,000 by 2008 – 15% of total demand.¹⁴

The imperatives of companies and policy-makers have traditionally diverged with regard to training and skills. Governments necessarily work on a timeframe of decades or generations. Companies are more concerned with matching workers to jobs on the basis of existing skills, only topping up these existing skills on a ‘minimum’ basis and with on-the-job training. Businesses often see spending on learning activities as a mechanism for ‘training their competition’. This thinking needs to shift.

Proper skilling of workers does not always require employees to undertake a separate and costly training programme. According to recent evidence, two-thirds of employees believe they learn most when working together with a colleague on a particular task.¹⁵ Businesses need to invest in making ‘knowledge mentoring’ a key part of their structure, systematizing informal learning. In addition, training must be more focused as a way of imparting ‘must-have’ skills.

¹³ Brinkley (2006).

¹⁴ IDC (2005).

¹⁵ LexisNexis Deutschland (2004).

Learning from Best Business Practices: The New Teller Performance Development Programme

The New Teller Performance Development Programme is an example of an internal training programme that has succeeded in addressing the mismatch between skill demand and supply. A consultancy was called in to solve the problem of a major retail bank that had seen internal training costs increase exponentially while delivering extremely poor results, of which the most disappointing was the fact that a majority of the tellers would leave the job just after the five-month training programme had been completed (they also reported being unimpressed by the programme, finding it not sufficiently relevant to their immediate jobs). Clearly, the training programme was badly managed: trainers were providing tellers with higher-than-required and company-specific skills as if employees would stay at this job for life. The new programme was predicated on different principles: training time was cut by 80% and trainers focused on more relevant content, providing tellers with ‘just-in-time’ rather than ‘just-in-case’ training. The operation resulted in a 30% saving in total training costs, and enhanced retention rates.

Identifying the new skill sets

As well as being responsive, businesses need to create strategies for enhancing and retaining talent in the longer term. A key challenge of the new European economy will be to identify which skills will be required in future and to map changing needs. In organizations where skills are spread across locations and borders, flexibility and responsiveness of deployment are crucial. Knowledge and skills – in both corporations and public organizations – must be viewed as portable talents rather than task-based requirements. Employees are the owners of human and intellectual capital whose competencies should be built by training and matched with jobs and resources. At a local level, businesses (and all organizations) should focus on understanding their talent and identifying the critical and most valuable skill areas. Identification of the skills of the future is crucial; ‘tagging’ of skills at an organizational level is the first step towards building competitive teams.

‘Skills tagging’ can integrate the development and deployment of talent into the day-to-day operation of the organization, and allow ongoing assessment of skill strengths and deficiencies. Its implications are applicable across all sectors.

Learning from Best Business Practices: Skills Tagging

In 2005 one of the Pendo group member companies felt the need to redefine its strategy in Europe and develop a new business model to respond to changing dynamics in the global business environment. The key reasons behind the decision to change its way of operating were:

- increasing price-driven competition, particularly from lower-cost global suppliers (Infosys, Tata etc.);
- key decisions not being taken close enough to the market they affected;
- mismatch of labour and skills supply and demand across Europe;

By developing capacity management of labour and focusing on skills development, the organization has been able to remain cost-competitive while changing the economic model to ensure continued delivery of growth.

This initiative was based on 'skills tagging' to categorize and review employees' skills and capabilities consistently across the organization in order to match supply and demand and move the workforce to a higher skills level. It was implemented through a self-assessment questionnaire on skills. Within the organization, a Deployment Unit now has the task of matching skill supply and demand so that it becomes easier for other departments to identify people with the skills they need, see in which unit/department they are located and check availability and current workload.

Skilling the new workforce: imperatives for business leaders

- Formal and informal learning should be 'blended' within the organization – 'systematize' learning on the job.
- Training should be more responsive to need – 'just in time' rather than 'just in case'.
- 'Knowledge mentoring' is a core value of successful business.
- Priority should be given to long-term analysis of skills requirements.
- 'Skills tagging' allows flexibility and ease in maximizing human capital.

1.3 Making education work

Although Europe invests less per student at all levels of education (primary, secondary, tertiary) than either the US or Japan,¹⁶ the OECD PISA survey shows Finland, Belgium, the Netherlands ranking higher than both the US and Japan.¹⁷ This suggests that it is not so much the level of investment per student that counts but its quality.

The example of Europe's best-performing countries needs to be extended to other countries and better translated into graduate performance. Taking the EU as a whole, only 20% of the EU population have reached tertiary education, as opposed to 40% for the US or Japan. Highly skilled workers accounted for more than a quarter of the workforce in only nine of the 25 EU member states before Romania and Bulgaria joined. In Italy, more than 50% of the workforce fall into the category of 'low-skilled', while a mere 10% boast a tertiary education.¹⁸

These comparative shortfalls are compounded by the fact that in key areas, science and engineering in particular, the proportion of European graduates is declining, and fewer of them are pursuing work in their academic field. Those who do increasingly find work in other economies: the European Commission estimates that 400,000 European researchers are living and working in the United States.¹⁹ These disciplines need to be promoted as attractive career options within Europe, and incentives – financial and cultural – are required to make R&D more rewarding. Europe has, conversely, proved attractive to graduates from the developing world to pursue careers in research. If Europe is to continue to win in this competition for talent, and make up the shortfall in research, it needs to retain its own scientists and engineers while at the same time making it easier for non-European graduates to apply for visas. An Australian-style points system encouraging immigration of individuals with necessary skills should be explored.

Importantly, education and training policies also need to adapt to rapidly changing requirements for new skills. The change in the IT services area provides an illustration. Whereas in the past these services tended to focus on 'repair and maintenance', they are now geared towards optimizing business. However, there is a lack of people in Europe with both IT and business skills. Creating a new discipline of 'Service Science' would provide for a multidisciplinary platform, able to bring together knowledge from diverse areas to improve the service industry's operations, performance and innovation. Such innovation in education policy would be an important step to meet the need for new skills in the IT services area.

In those economies that have seen spectacular growth in the knowledge economy, for example South Korea, strong links between research institutes, businesses, schools and universities have proved fundamental to success. Greater collaboration, at all levels, would clearly be of mutual benefit in Europe. Knowledge and education need to be treated to a greater extent as productive assets. Some parts of Europe are more successful in promoting this synergy than others. For example, in Austria the car manufacturer Magna Steyr helps develop the curriculum of the local university and high school with its own required skills in mind: in turn the school and university supply more than a third of the company's skilled workforce.

¹⁶ OECD PISA (2004). The OECD Programme for International Student Assessment (PISA) surveys 15-year-olds in the principal industrialized countries every three years and assesses to what extent students near the end of compulsory education have acquired the knowledge and skills essential for full participation in society.

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ Cowan (2006).

Learning from Best Business Practices: The Shanghai Model

The Shanghai Information Tech College (SITC), a government agency charged with enhancing the city's technology culture, wanted to increase the software programming skills of those citizens with college or university backgrounds. The goal was to establish a local workforce of knowledgeable programmers and engineers to supply Shanghai's growing number of high-tech companies with qualified workers. The lack of sufficient IT resources was hampering Shanghai's ability to attract high-tech businesses to the region. Working on a tight budget and with limited teaching capacity, SITC turned to business for a solution.

Working with SITC, one of the Pendo group member companies implemented a comprehensive training programme to enhance students' software skills. Students learned how to work out problems in real-world scenarios through a three-tiered format, consisting of class lectures, demanding lab exercises and team projects embodying classroom concepts. Students received training on multiple platforms and experience with the technologies most relevant to today's market-place needs. In partnership with SITC, the Pendo group member company will train 300 instructors over the next three to four years. All told, about 5,000 students from the local workforce and colleges are expected to take the classes. Additionally, the company will establish and oversee an internship programme that places approximately 10% of programme graduates in internships, enabling them to gain hands-on experience in real business and IT environments.

Results: SITC expects Shanghai to receive major benefits from its corporate relationship. By modernizing itself through human capital development, Shanghai can become more competitive in the global market-place and create a thriving technology solutions market.

Making education work: imperatives for learning organizations

- Science, engineering and ICT should be promoted in tertiary education.
- Graduates need to be incentivized – through culture and reward – to pursue research with a commercial application.
- Europe needs to retain its own scientists and ease visa procedures for relevant non-European graduates.
- While preserving their distinctive function, universities and schools must recognize businesses as stakeholders, with a role to play in curriculum design, and potential as outsource educational partners.
- Governments, industry and universities together must enable the creation of a new academic discipline and research area to bring together ongoing work in computer science, operations research, industrial engineering, business strategy, management sciences, social and cognitive sciences, and legal sciences to develop the skills required in a services-led economy (known as Service Science).

1.4 Making learning a way of life

If individuals are to flourish within the knowledge economy, education cannot be a discrete activity that ends after university, but a lifelong process of skills and knowledge acquisition. The EU participation rate in lifelong learning – defined as participation by people aged 25 or over in any sort of learning activity – stands at 42%. However, this figure falls from 50% for the 25–34 age group to just under 30% for the 55–64 age group.²⁰ There is also wide geographical variation. More than 40% of the labour force in Denmark, Finland, Sweden, enrol in job-related education each year (a figure comparable to the United States). By contrast fewer than 10% in Greece, Hungary, Portugal and Spain embark on such training each year.²¹

Individuals need to be incentivized to take responsibility for their own learning. One model of incentive was developed by the Clinton administration in the US. A fixed ‘training credit’ was set aside for the use of employees for lifetime learning and development under the 1998 Workforce Investment Act. Individual Training Accounts (ITAs) empowered job seekers to intervene more actively in their own development, though there were complications in delivery. One the greatest challenges to establishing ITAs is the financing of the system; in an ideal world all stakeholders – governments, employers and employees – should contribute.

For such a programme to be successful, education needs to be accessible from a variety of platforms. Technology can be a significant driver. E-learning is a significant means of delivering reskilling tailored to individual needs; it also allows individuals to equip themselves for the knowledge economy in their own time and at their own pace. In Finland the national ‘Education, Training and Research in Information Society’ strategy offers a virtual school, university and technical college. In the United States, MIT has pioneered the use of online learning modules; there is considerable scope for European universities to extend the reach of their educational resources.

Making learning a way of life: imperatives for individuals

- Individuals should be incentivized to take responsibility for continuous learning, for example through lifetime training account and tax incentives.
- Training and education should be delivered through a variety of platforms.
- E-learning provides the opportunity to tailor education to individual needs and allows flexible study patterns.

²⁰ Eurostat, <http://epp.eurostat.ec.europa.eu/portal..>

²¹ Ibid.

2 CREATING EUROPE'S ADAPTIVE ORGANIZATIONS

To create an environment in which Europe's human capital can realize its potential and meet the challenges of the knowledge economy, new organizational models are needed. A flexible labour force is the first prerequisite for an adaptable organization, but it is not the only factor in driving change. This section explores how to transfer best business practices to complex organizations, in particular those operating at a supranational level. In our view, much can be learned from the best practice of the private sector where the experience of multinational, cross-border businesses can provide valuable lessons for policy-makers.

Organizations inevitably have to take into account various constraints, some of which are structural, such as labour market rigidities, strict employment legislation and the presence of strong labour unions; these can conspire to make European enterprise slow to change and comparatively inflexible. Other barriers to change are cultural; for instance, strictly hierarchical, top-down organizations will not thrive, and may not survive in the new global economy.

The challenge, again, is to align the imperatives of Europe's policy-makers, employers and employees. Our analysis strongly suggests that business leaders must focus on achieving maximum adaptability within the constraints presented by the external environment (regulatory, market etc.) while engaging with policy-makers to lessen the negative impact of those constraints.

Policy-makers must find ways to ensure that social and economic reforms are mutually reinforcing. Much can be learned from the best practice of the private sector; in particular state-owned enterprises can drive transformation by properly engaging their employees in the process of change.

Two principal imperatives emerge as the fundamental attributes of organizations equipped for the adaptive economy:

- operating models which are decentralized, responsive to new realities, structurally committed to evolution;
- a communication culture that can 'unfreeze' traditional working practices and persuade the 'internal electorate' to vote for change.

2.1 New operating models

Organizations prize adaptability as a means to perform more efficiently, engage the workforce and improve performance. Organizational adaptability is an area where micro interventions, tailored to organizations' specific needs, can prove highly effective. Best business practices can provide valuable lessons to all sectors.

Centrally controlled, over-regulated organizations are ponderous, and fail to maximize the human capital that is their principal asset. Decentralization should reduce organizational complexity, allowing a better central focus on key priorities. In supranational organizations devolving management responsibilities to the local level enables more autonomy, more dynamism and more agility. Engagement at the local level should help draw on the depth of expertise available on the ground and exploit knowledge of domestic and regulatory environments.

Learning from Best Business Practices: Changing the Mix in Concrete

In recent times, the profitability of one of the UK's largest players on the aggregates markets has been seriously challenged by increasing competition at home and abroad. A programme was launched in 2004 to reduce overhead costs. A close look at the business, however, identified fundamental obstacles to organizational effectiveness. One of the Pendo group member companies proposed instead a new set of design principles to turn around the organization:

- optimizing local versus national management;
- managing performance effectively across the business;
- proactively promoting best practice and standardization where appropriate;
- abolishing three large regions, decentralized to 10 smaller areas;
- reducing direct reports to the CEO;
- providing rewarding career paths to encourage talent;
- insisting on flexibility to adapt.

Organizational restructuring brought in more decentralization, with the area directors focusing on customers and operations. Consensus was built with the management and area directors before implementation; change was carefully sequenced and phased, each stage being rapidly implemented to reduce uncertainty. The most visible benefits were: economies of scale, learning across the areas, reduction in overheads by 15%; and the overall business becoming more transparent to Head Office.

The aggregates company's experience revealed the advantage of strong core values allied to devolved management. The focus was on a few critical behaviours driving value in the business and greater autonomy for frontline teams. Organizations are more responsive when they lower their 'centre of gravity'.

2.2 Effective communication

If change is to be managed successfully the key driver is always communication. Change is expensive – there are financial and 'intangible' costs affecting individuals as well as social costs. In addition, individuals tend to be risk-averse. Employees at all levels must be persuaded of the benefits of change and made to feel that they 'own' the process. Adaptive organizations must convince their 'internal electorate' to vote for change. In this area government departments and EU organizations can learn from best practices pursued in the private sector.

Learning from Best Business Practices: Managing Human Complexity in Installing Change

The company, a subsidiary of a large French international group, was facing a gradual but irreversible decline of production. Along with adapting the firm's long-term production plan, the restructuring plan included a workforce reduction in order to match the future production plan and a scheme to share the production site with a third party and so reduce the very heavy infrastructure costs. Once the new organization structure was designed, but before its implementation, the executive management was presented with the task of persuading senior colleagues to support the plan. The management group, representing the top 5% of the company, were fundamentally in favour, but had some reservations:

- the timing of implementation was deemed to be unrealistic;
- they did not feel sufficiently involved with the change;
- they were unsure that the proposed organization structure would appropriately tackle the firm's problems.

Most of all, they were concerned about internal and external opposition that the proposed change could generate, given the level of unionization and the presence of some influential local Members of Parliament. The change was eventually pushed through with success, thanks to some of the measures taken. In essence, the strategy revolved around a few basic principles:

- Heavy internal communication at all levels using different tools (flyers, monthly newsletters, posters and video) and types of media (forum, small group meeting, and web questions). The communication programme was essential in enabling managers to see the rationale for change and realize how the reform process would alter their role, tasks and responsibilities, as well as their colleagues' perceptions of all three.
- Direct involvement of the top management in the setting-up of the new organizational structure, including the fine-tuning and adjustment of the initial plan. The direct involvement of the top management helped the changes to cascade down to lower levels, and ultimately to labour unions.

The plan was successfully implemented, with the number of departments and services reduced from 79 to 51 and the workforce reduced by 20%. Even more importantly, it was well received by all with no walk-out or bad press, and the redundancy plan was approved by the unions' delegates.

In order to communicate change leaders need to understand it. It is of pivotal importance to have a clear target – what to change; a good case for it – why to change; and a workable plan – how to change. It is necessary to establish a ‘safety valve’ through which people can express their dissatisfaction with the proposed change and implementation. The pace of change is also crucial. Keeping up momentum and showing some results, even if partial, early on in the process are both absolutely necessary.

When communicating across supranational organizations technology provides a perfect platform not only for targeted communication but for input from all stakeholders.

Learning from Best Business Practice: ‘Jam’ Technology

In 2005, sponsored by the government of Canada, one of the Pendo group member companies mediated a global online dialogue, which lasted 72 hours, involved approximately 39,000 participants from 158 countries and resulted in hundreds of actionable items on urban sustainability to create the agenda for a World Urban Forum. The goal of Habitat JAM was to engage with tens of thousands of global citizens, rich and poor alike, with the ultimate goal of turning ideas into actions. Subject-matter experts and moderators guided participants to build on each other’s ideas, and text-analysis tools helped to capture and play back key themes. In just over three days, the participants produced over 4,000 pages of dialogue and generated hundreds of actionable ideas on critical issues related to urban sustainability, including ideas for empowering women and young people and suggestions for the opening of ‘technology hubs’ to give the urban poor access to meeting space and the internet.

Such technology created a stable, robust, and easy-to-use collaborative environment that allowed tens of thousands of participants who could never otherwise have ‘met’ to do so. The technology has since been used in various business frameworks and has clear implications for governments, particularly in Europe – where dialogue must often take place across borders and on a mass scale.

2.3 Incentives to change

In all cases, the challenge in managing change is not just to design the right strategy or policy but to implement it. For example, although EU member states have made good progress in implementing their Internal Market legal obligations, there is still a great deal of room for improvement.²² The key to successful implementation lies in securing individuals’ commitment to change. A range of incentives can accelerate this process. Some motivation theories – those of Maslow, and Herzberg – assume that people are primarily motivated internally, by the intrinsic nature of the job and a culture of excellence. Others – for example Taylor – assume that people are primarily driven by reward, punishment and the

²² European Commission (2007), p. 13 (Figure 6): ‘The average number of recommendations implemented by Member States increased from below 15 to 17, out of a total of 23 recommendations in half a year’ [2006].

measurement of progress towards goals. Triggering internal motivation factors is certainly less costly. It appears to be even more effective than the practice of external rewards.²³ Internal motivation must be pursued within a context of security and flexibility. Additionally, securing and maintaining high employability through up-to-date skill sets optimizes internal and external redeployment opportunities and thus organizational and individual flexibility and progress.

Learning from Best Business Practices: The Toyota Way

Toyota's culture emphasizes the use of challenging work situations to build a self-confident and adaptable workforce. A reward system which goes beyond money motivates people to challenge the status quo and move out their comfort zone. People are also motivated by challenging, but attainable goals and measurements of progress towards those goals. A key feature of Toyota's culture, which motivates people and reduces their aversion to change, is the notion that the company provides for the lower-level needs – fair treatment, career opportunity, good pay, safe working conditions. Ensuring the fulfilment of these needs in return for asking people to adapt and creatively respond to change is perceived as a fair deal.

Creating adaptive organizations: imperatives for change

- Policy-makers should engage in reviewing and removing barriers to organizational change.
- New operating models should be decentralized while core values are retained.
- Organizations should incorporate effective communication as a fundamental internal value to persuade their 'electorate' to vote for change.
- Properly paced transformation requires an effective 'road map'.
- Technology should be utilized as a forum for change.
- Individuals should be incentivized to adapt within a framework of security.

²³ Liker (2004).

3 DRIVING INNOVATION IN EUROPE

In the previous sections we discussed the need for a resilient workforce and more adaptable organizations and looked at how these may be encouraged. In this section we examine innovation as a way to exploit existing opportunities and to create new ones.

In our rapidly changing world individuals and organizations are increasingly asked to perform more complex tasks more quickly and, often, to meet even higher quality standards. Such 'just-in-time' requirements applied to human resources stretch capabilities to the limit and cannot succeed if structures, competencies and technologies remain as weak as many believe they are in Europe.²⁴ Rapid technological development is a driving force behind the ability to adapt and to respond to change. As such, it is not sufficient to use new technologies simply to support existing structures and systems, but innovative and future-oriented organizational solutions will also be necessary. So it is as critical to supplement technology with the right 'systems' as to support people and organizations with technology.

Innovation is also the driving force in increasing competitiveness and accelerating growth in the service sector. This is Europe's fastest-growing sector, with over 70% of both total EU economic value added and EU employment. Government innovation policies, R&D budgets and programmes have historically focused on hard sciences and manufacturing. Priorities need to be rebalanced, given the fact that services are the source of most jobs and economic activity.

Innovation, which helps organizations and workers to move rapidly into new activities, to improve production processes and to become more efficient, is therefore a complement to a resilient workforce and adaptable organizations. Indeed, it makes workers more productive and organizations more efficient, but it needs a 'quality' workforce and 'quality' environment to produce the optimal results and realize its full potential. For instance, in the EU-25 the annual expenditure for IT hardware, equipment, software and other services was 3% of gross domestic product (GDP) compared with 4% in the US. Only 21% of individuals aged 16–74 had high level of computer skills in 2006.²⁵ The use of ICT can help organizations become leaner and workers more efficient. But organizations, in their turn, need to be adaptable and workers need the skills to benefit fully from technological advances.

The Lisbon Agenda challenges European policy-makers to accelerate investment in research and development to 3% of GDP across the Eurozone. This is a challenge to business leaders too. At present the EU-25 spend 1.9% of GDP as opposed to 2.6% in the US and 3.2% in Japan; only just over half of that European expenditure comes from business.²⁶ With the notable exceptions of Finland and Sweden, the EU performs poorly against the US and the emergent Southeast Asian economies on most measures on the 2006 Global Innovation Scoreboard. One notable example is the ability to translate research into patents.²⁷ Because of barriers to innovation, including fragmentary and uncoordinated policies, many multinational companies find it expedient to site their R&D outside Europe. In the five years to 2002, European firms invested five times as much in the US (a total of €2 billion) as US firms did in Europe.²⁸

²⁴ This point needs to be taken with a pinch of salt as it is far from obvious that other countries actually do much better at this complex task – certainly it is often raised as an issue elsewhere, such as the US.

²⁵ Eurostat, <http://epp.eurostat.ec.europa.eu/portal>. A 'high level of computer skills' is defined as being able to carry out one or more of the following computer-related activities: 'used a mouse to launch programs such as an Internet browser or word processor; copied or moved a file or folder; used copy or cut and paste tools to duplicate or move information on screen; used basic arithmetic formulae to add, subtract, multiply or divide figures in a spreadsheet; compressed files; written a computer program using a specialized programming language.'

²⁶ European Commission (2005a).

²⁷ MERIT (2006).

²⁸ European Commission (2006a).

Investment alone will not guarantee innovation, however. Focused policies and strategies need to be implemented in order to foster innovation. At present R&D budgets within the EU are bureaucratic and scattered. Spending on R&D needs to be more focused and directed to the promotion of an innovation culture.

Transforming Europe into a knowledge-intensive and globally competitive economy is, even with sufficient investment, not straightforward. It requires a paradigm shift through complementary investments and changes, e.g. in human capital, organizational change, education, trust and security. It is vital that we manage the transformation to a European knowledge economy not only from a technological but also from a socio-economic and human capital perspective.

Innovation is as much a mindset as a process. Once again the challenge is to align all stakeholders – policy-makers, business leaders and educationalists – in order to devise a common strategy.

The imperatives are clear:

- Policy-makers must create environments within Europe where innovation with practical, commercial application can thrive. Barriers to change – cross-border, historical, cultural – must be overcome. Innovation can be led by procurement choices and a future-oriented culture of public-service provision.
- Business leaders must bring innovation into the core of their operation and prioritize R&D in partnership with government, universities and research institutes.

In all cases the response to stimulating innovation should be closely targeted at the new economy, highly selective in funding and properly collaborative.

3.1 Developing an innovation culture in Europe

Former Finnish premier Esko Aho's recent report 'Creating an Innovative Europe'²⁹ provides a clear framework for the way ahead for European policy-makers. Its emphasis on the creation of an innovation-friendly market, and its argument that innovation can be the driver of social policy, are welcome. Its implementation will require significant pan-European commitment to a long-term vision as well as a light touch with regulation. Policy-makers need to invest in a range of incentives to retain the best talent within Europe and attract it from overseas. R&D grants need to be targeted with an eye to the newest technologies. Tax and other incentives to business are essential if the 3% investment target is to be reached. In addition, proper benchmarking of innovation performance across the EU is necessary. A specific EU policy unit, with an autonomous budget, committed to innovation, led by a 'Chief Scientist', should be considered.

Aho's report also touched on the idea of scaling, which is a fundamental prerequisite for helping sustainable innovation to germinate. Centres of excellence, formed around a significant group of industries or first-rate research establishment, are necessary to achieve a sufficient scale of activity, a tipping point of ideas generation. Europe should do more to

²⁹ European Commission (2006c).

promote national and regional specialization in particularly fertile sectors – pharmaceuticals, transport, energy – to avoid fragmentation of specialist knowledge communities. Clustering has a multiplier effect on creative thinking: Silicon Valley did not arise by accident.

Learning from Best Business Practices: Optimizing Clusters

One example of the difficulties and possibilities of promoting clustering in Europe is 'BioValley', which occupies the area between Freiburg, Basel and Strasbourg. The valley incorporates biotechnology industry, related technologies and first-class research institutes across the borders of three countries. The promotion of BioValley fell between Switzerland, Germany and France, and individual national governments supported the financing of specific research through different initiatives. The cluster, though promising, lacked an integrated vision and was not maximizing the potential for sharing resources and networking. One of the Pendo group member companies proposed a strategy that involved creating and managing networks between different stakeholders and communicating a simple vision internally and externally. This would encourage collaboration, prevent overlap and foster economies of scale. It would also create a more coherent platform for investment from big pharmacology companies and governments.

The role of governments: procurement as a catalyst to innovation

By modernizing government processes and public-service delivery large budgetary savings can be made. The benefits are twofold. A proportion of the savings can be invested in further innovation in service provision, and governments can act as a catalyst for technological change by directly supporting cutting-edge systems and products.

In particular, in the coming years the expansion of e-government will help reduce the cost of administrative services as well as increasing the benefits for citizens and in particular for companies. This is the area where the public sector can become a customer and promoter of future technologies, by the development of secure electronic means of communication between government and citizens. At present, in the enlarged EU, 50% of the 20 basic government services are available online, with peaks of 83% and 71% in Austria and the UK respectively.³⁰

Innovation is not only the result of progress initiated by suppliers, but can be promoted by the procurer. There is therefore scope for the public sector to stimulate innovation through its procurement choices. At present procurement processes are often cripplingly bureaucratic, designed primarily with fraud prevention in mind. This is counterproductive. The EU would benefit from re-examining its procurement guidelines and legislation with a view to encouraging and investing in innovative products and services.

³⁰ Ibid.

Learning from Best Business Practices: Innovations for Administrations

The German Federal Government's strategic goals are to radically improve the general environment for growth and employment and to consolidate public budgets on a sustainable basis. Special importance is attached to the modernization of public administration. With the 'Focused on the Future: Innovations for Administration and E-Government 2.0' programme, the Federal Government has launched an overall strategy for the modernization of the federal administration that encompasses the areas of human resources, management, organization and e-government. The goal is to use innovative solutions to create a more efficient public administration by 2010, one capable of responding competently, swiftly and reliably to citizens' concerns. The challenges to be addressed are the following:

- cross-organizational cooperation between institutions from different areas;
- information and knowledge management based on the internet to enhance the quality of decision-making;
- standardized electronic transactions to be processed and bundled more efficiently, and integrated with existing paper records.

The German example is based on the principle that it is not enough to utilize new technologies to support existing structures and systems; future-oriented organizational solutions are also necessary.

Developing an innovation culture: imperatives for policy-makers

- Europe needs a policy unit dedicated to innovation, perhaps led by an EU 'Chief Scientist', in order to create a coherent portfolio of R&D projects, and to enhance regional and national specialisms.
- More benchmarking of innovation performance across the EU is necessary. Existing benchmarks and indicators must be adapted to also measure innovation in services.
- An integrated approach is needed to get 'innovation clusters' to interact and mesh efficiently.
- EU R&D needs a coherent framework of funding to offer more impact.
- All policy areas – taxation, grants, immigration and intra-European mobility – should be directed towards making the EU a magnet for innovation – attracting and retaining a critical mass of researchers.

3.2 Creating change through innovation

At a micro level, there are many successful examples of organizations that have been able to use innovation most effectively to deliver and accelerate change. In most cases the issue is not, simply, cost reduction – although that does provide a justification for spending on innovation. Improving overall performance and the quality of the service is critical.

Technology can drive change and provide a collaborative platform for ideas-generation and problem-solving through mediated sharing of expertise – a process known as ‘swarming’. As technology solutions need to be blended into the organization, the business, policy and technology agendas should be aligned. A central ‘Organization Architecture Team’ (OAT) is one way of ensuring the alignment of key decisions as well as the constant exchange of ideas, knowledge and best practices.

Learning from Best Business Practices: Using Innovation to Overcome Inertia

The merger of the UK Inland Revenue and of the Customs and Excise resulted in a department of over 100,000 staff covering Tax and Customs. There were significant inefficiencies in organization, processes and systems. Organizational silos and a lack of effective cross-department governance were significant barriers to change and prevented efficient strategic decision-making. As part of the UK government’s budget planning, the Treasury set the challenge of reducing annual costs for the Department by 20% within five years, while increasing yield and compliance on tax collection and improving the overall service – with users being able to speak with the right person at the right department at first contact. The challenge demanded a complex, cross-department solution – Her Majesty’s Revenue and Customs has 36 different Directorates. New IT solutions were implemented to drive organizational transformation. The key part of the project was the use of an active ‘Ecosystem’ of consulting, hardware and solutions partners. Among the components of this Ecosystem were ‘Special Interest Group’ workshops gathering all the relevant stakeholders to discuss areas in which a transformation was required and a specific technique named ‘Accelerated Solutions Environment’ (ASE) for developing and gaining buy-in to the complex organizational restructuring that was under way. The greater involvement of all stakeholders, consensus-building techniques and speedy implementation of these ideas have prevented inertia or delay and contributed to creating an internal innovation culture.

Incubating new thinking

Businesses progressing through maturity tend to become less innovative and find it increasingly hard to expand existing possibilities, let alone explore new ones. It is a struggle to remain competitive and respond to external change. Organizations often suffer from lack of coordination of innovation management activities across units or regions; they may lack an embedded risk-taking culture.

Even more important, many organizations do not have enough slack – organizational as well as financial – to experiment with processes and tools. Market and policy considerations tend to influence and constrain R&D. A solution to this inertia is for organizations to ‘incubate’ thinking in special innovation units that are insulated from day-to-day issues and operate on a long-term timeframe. Such units should focus on collecting, filtering, prototyping, testing and creating new ideas and proposals. The input from the innovation unit should feed into the organization, facilitating sharing of best practice and knowledge management. The organization, in its turn, should promote, both internally and externally, the innovation unit’s vision, values and capabilities, and provide support.

Learning from Best Business Practices: The New ‘Innovation Unit’

A leading multinational mobile network operator with 50+ million customers needed to innovate on voice and data services to tap new sources for further revenue growth as the demand for traditional voice communication was reaching saturation in most markets. A new separate unit, to serve as a dedicated innovation magnet, was established with the goal of identifying, screening, developing and trialling potential new products and services with a relatively long time-to-market horizon and unusual features. These had not been systematically pursued by either R&D or the core marketing teams. Within six months from implementation the Innovation Unit was able to deliver far greater innovation output results which had an impact across the whole business.

Fast followers

Organizations that embrace change do not necessarily have to be original in their thinking and practice in order to succeed. They can be fast followers rather than originators. They can collaborate to expedite innovations. Fast followers are as important as the innovators in fostering and spreading new ideas as well as in instilling a culture of innovation throughout the supply chain. Suppliers must be an integral part of the innovator’s philosophy. They can absorb new ideas and share practice with the innovator. The supply chain should be viewed as a cluster of innovative centres.

Learning from Best Business Practices: Virgin Atlantic

Launched in 1984, Virgin Atlantic has managed to acquire an important share of the air transport market in spite of the dominating presence of much larger companies such as British Airways. Focusing on distinctive and 'idiosyncratic' products and service allows Virgin Atlantic to compete successfully against much larger organizations in a sector with huge fixed costs. The in-house team is responsible for generating new ideas and developing new products and services. It collaborates with many external design and engineering consultants to acquire specific expertise for product development. When the prototype of a finished product is ready, it is taken to the manufacturer. From then on the in-house design team and the engineering team work more closely with the manufacturer to ensure that the final product conforms exactly to the right specifications and standards, and reflects the company's overall approach – i.e. the 'Virgin experience'.

Creating change through innovation: imperatives for business leaders

- Technology, particularly ICT, should be harnessed to accelerate change, creating virtual ideas labs and collaborative platforms ('swarming').
- On a micro level companies should explore different models of innovation.
- Innovation Units can be effective in incubating new thinking.
- Innovation should involve input and collaboration throughout the supply chain.

4 CONCLUSIONS

The imperatives, practical examples and analysis in this report outline some of the ways in which Europe must prepare for new global economic realities. We have concentrated on three dimensions of this challenge: human capital, organizational flexibility and innovation. There are distinct opportunities for new thinking in each of them.

‘Managing Change in Europe’, however, will not happen without coordinated efforts from the stakeholders – including policy-makers, business and public-sector leaders, educationalists and individuals – across all fronts. If Europe is to continue to compete in the knowledge economy and fulfil the ambitions of the Lisbon Agenda, then a cultural shift is required. The ways in which these structural changes are coordinated on a macro and micro level, the pace at which they are implemented and the way in which they are communicated will have fundamental implications for growth and prosperity.

- Policy-makers must concentrate on ways of increasing the size of the employable, skilled population in order to offset the ageing population. They must work to further break down national barriers and extend portability and universality of qualifications and benefits. A culture of innovation can be generated through imaginative investment and procurement, and the extension of e-government. A shift from a technology-centric to a holistic view that encompasses both technology and business with a special focus on services innovation is needed.
- Business leaders must be more imaginative and flexible in their approach to training and skilling their employees. They should seek to make their organizations more devolved across Europe and responsive to change while retaining strong core values. Innovation must be the key driver of systems and processes, not an add-on.
- Schools and universities play the key role in developing the next generation’s workforce; they must overcome their resistance to seeing employers as stakeholders. Research needs to be targeted toward commercial application. All institutions need to take on a responsibility to work with industry to fill skill gaps, particularly in ICT and science. instrumental in driving the competitiveness of the European ICT and knowledge service providers, given the sector’s dependence on highly skilled workers.
- Individual workers must be given – and must take – more opportunities and incentives to invest in their personal skills, putting an emphasis on new types of skills acquired on a flexible basis. Education cannot stop at eighteen but must be a process lifelong learning – with a purpose. Rather than employment protection legislation, portability of skills, preparedness for mobility, and overcoming resistance to change will be key factors in individual success.

REFERENCES

- Brinkley, Ian (2006), *Defining the Knowledge Economy*, Knowledge Economy Programme Report, The Work Foundation, July, theworkfoundation.com/Assets/PDFs/defining_knowledge_economy.pdf.
- Coase, R.H. (1988), *The Firm, the Market and the Law*, University of Chicago Press, Chicago.
- Cowan, Tyler (2006), 'Poor U.S. Scores in Health Care Don't Measure Nobels and Innovation', *New York Times*, 5 October.
- EIRO (2007), European Industrial Relations Observatory online, 'Partial opening of labour markets to workers from new Member States', March, www.eurofound.europa.eu/eiro/2007/country/austria.html.
- European Commission (2005a), Key Figures 2005 on Science, Technology and Innovation, Towards a European Knowledge Area, DG Research, July.
- European Commission (2005b), 'More Research and Innovation – Investing for Growth and Employment: A Common Approach', Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions, COM(2005) 488 final, Brussels, 12 October.
- European Commission (2005c), 'Proposal for a directive of the European Parliament and of the Council on improving the portability of supplementary pension rights', COM(2005) 507 final, 20 October.
- European Commission (2006a), 'Creating an Innovative Europe', Report of the Independent Expert Group on R&D and Innovation appointed following the Hampton Court Summit and chaired by Mr Esko Aho, EUR 22005, January.
- European Commission (2006b), 'Putting knowledge into practice: a broad-based innovation strategy for the EU', Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions, COM(2006) 502 final, Brussels, 13 September.
- European Commission (2006c), *Innovation and Public Procurement. Review of Issues at Stake*, Fraunhofer Institute for Systems and Innovation Research, No. ENTR/03/24.
- European Commission (2007), Internal Market Scoreboard, 1 February (Report, December 2006), http://ec.europa.eu/internal_market/score/index_en.htm.
- European Competitiveness Index (2006), Robert Huggins Associates, University of Sheffield.
- Eurostat, <http://epp.eurostat.ec.europa.eu/portal>.
- Eurostat news release 48/2005, 8 April 2005, <http://epp.eurostat.ec.europa.eu/portal>.
- Grose, Thomas K. (2007), 'Germany's Bright Flight', *Prism*, American Society for Engineering Education, Vol. 16, No. 8, April, http://www.prism-magazine.org/apr07/feature_germany.cfm.
- IDC (2005), 'Networking Skills in Europe: Will an Increasing Shortage Hamper Competitiveness in the Global Market?' (Analysts Marianne Kolding and Vladimir Kroa), IDC White Paper commissioned by Cisco Systems, September, www.idc.com.
- LexisNexis Deutschland (2004), 'Ergebnisse der Wissensmanagement Studie 2004', March, <http://www.lexisnexis.de/downloads/040305praesentation.pdf>.
- Liker, J.K. (2004), *The Toyota Way: 14 Management Principles from the World's Greatest Manufacturer*, McGraw-Hill Professional, New York.
- MERIT (2006), Maastricht Economic and Social Research and Training Centre on Innovation and Technology, '2006 "Global Innovation Scoreboard" (GIS) Report' (authors Hugo Hollanders and Anthony Arundel), 4 December 2006, <http://trendchart.cordis.lu/scoreboards/scoreboard2006>.
- OECD (2004), 'PIAAC draft strategy paper: policy objectives, strategic options and cost implications', 15–16 November, www.oecd.org (Programme for the International Assessment of Adult Competencies).
- OECD PISA (2004), Survey, 'Learning for Tomorrow's World', www.pisa.oecd.org.
- Williamson, O.E. (1975), *Markets and Hierarchies*, Free Press, New York.

APPENDIX: 'MANAGING CHANGE IN EUROPE' – WORKSHOP AGENDAS

WORKSHOP 1: SKILLS, TALENT & CULTURES: HOW TO CREATE A RESILIENT WORKFORCE IN THE FACE OF GLOBALIZATION AND CHANGE?

Chatham House, London, 13 December 2006, 09:00–14:00

- 09:00-09:05 Welcome and Introduction
Paola Subacchi, Chatham House
- 09:05-09:55 Session 1: Matching supply to demand in the labour market: the role of re-skilling and training
Presenter: Gil Gidron, Accenture
Discussant 1: Lena Westerlund, Senior International Economist, Swedish Trade Union Confederation
Discussant 2: Henk Jan Bakker, Head of Economic Department, Embassy of Kingdom of the Netherlands
Chair: Robert Strauss, Head of Unit, DG Employment, Social Affairs and Equal Opportunities, European Commission
- 09:55-10:45 Session 2: Creating the opportunity for change: using best business practice to increase accessibility to labour markets
Presenter: Bill Cook, Capgemini
Discussant 1: Stéphane Ouaki, Deputy Head of Cabinet of Mr. M. Vladimír Špidla, Commissioner for Employment, Social Affairs and Equal Opportunities
Discussant 2: Alexandra Pardal, Adviser PES (Party of European Socialists)
Chair: Andrew Fielding, Speechwriter to the Commission President, Bureau of European Policy Advisers
- 10:55-11:45 Session 3: Rethinking the 'job for life': how organizations can develop and retain talent
Presenter: Anne-Marie Malley, Deloitte
Discussant 1: Peer Ederer, Professor of Innovation, Zeppelin University
Discussant 2: Niels Westergård-Nielsen, Professor, Aarhus School of Business
Chair: Paul Hofbeinz, President, Co-Founder, The Lisbon Council
- 11:45-13:00 Session 4: Discussion and conclusions
Chair: Paola Subacchi

WORKSHOP 2: CAN ORGANIZATIONAL FLEXIBILITY HELP EUROPE IMPROVE PRODUCTIVITY AND BOOST ECONOMIC GROWTH?

Chatham House, London, 26 January 2007, 09:00–14:00

- 09:00-09:05 Welcome and Introduction
Paola Subacchi, Chatham House
- 09:05-09:55 Session 1: The challenge of global competitiveness: using incentives and new operating models to improve productivity
Presenter: Nick Potts, Associate Partner, Strategy Consulting, IBM
Discussant 1: Vicky Pryce, Chief Economic Adviser and Director General Economics, DTI
Discussant 2: Lee Hopley, Senior Economist, Engineering Employers' Federation
Chair: Maurice Fraser, Fellow in European Politics, European Institute, LSE

- 09:55-10:45 Session 2: Communicating the Lisbon Agenda: how to overcome resistance and explain change
Presenter: *Philip Morel, Management Consulting Group PLC*
Discussant 1: *Jim Rollo, Professor of European Economic Integration, University of Sussex & Associate Fellow, Chatham House*
Discussant 2: *Jørgen Rønne, Director, International Affairs, Confederation of Danish Employers*
Chair: *Peter Smith, Bureau of European Policy Advisors*
- 10:55-11:45 Session 3: Managing the transition to a knowledge-based economy: flexibility, adaptability and responsiveness
Presenter: *Keith Leslie, Partner, Deloitte*
Discussant 1: *Fernando Vasquez, Deputy Head of Unit, Directorate-General for Employment, Social Affairs and Equal Opportunities, European Commission*
Discussant 2: *Keith Ruddle, Fellow in Leadership, Organisation and Change, Saïd Business School, University of Oxford*
Chair: *Hans Martens, Chief Executive, European Policy Centre*
- 11:45-13:00 Session 4: Discussion and Conclusions
Chair: *Paola Subacchi*

WORKSHOP 3: INNOVATION: A TOOL FOR CHANGE? HOW NEW PROCESSES CAN IMPROVE PERFORMANCE AND BOOST PRODUCTIVITY

Chatham House, London, 8 February 2007, 09:00–14:00

- 09:00-09:05 Welcome and Introduction
Paola Subacchi, Chatham House
- 09:05-09:55 Session 1: Using innovation to improve productivity and foster public–private partnerships
Presenter: *Paul Hocking, Vice President, Capgemini*
Discussant 1: *Andrea Gavosto, Chief Economist, Public and Economic Affairs, Telecom Italia*
Discussant 2: *Alison Campbell, Managing Director of KCL Enterprises Ltd & Member, UNICO Committee*
Chair: *Koshi Noguchi, Vice President, EU-Japan Relations, Toshiba of Europe, Ltd & Visiting Fellow, Chatham House*
- 09:55-10:45 Session 2: Expanding existing markets, creating new opportunities: can innovation help?
Presenter: *Gil Gidron, Accenture*
Discussant 1: *Joe Ferry, Head of Design, Virgin Atlantic Airways*
Discussant 2: *Javier Echarri, European Private Equity and Venture Capital Association (EVCA)*
Chair: *Ray Lambert, Deputy Director, Science & Innovation Analysis (SIA), DTI*
- 10:55-11:45 Session 3: A customer and promoter of future technology: a new role for the public sector?
Presenter: *Eckard Schindler, Business Development Executive, IBM*
Discussant 1: *Jakob Edler, Professor of Innovation Policy and Strategy, PREST and the Institute of Innovation Research, Manchester Business School, University of Manchester*
Discussant 2: *Gerard Monks, Assistant Principal Officer, Competitiveness Division, Dept of Enterprise, Trade and Employment, Ireland*
Chair: *Reinhard Büscher, Head of Unit, Innovation Policy Development, European Commission*
- 11:45-13:00 Session 4: Discussion and conclusions
Chair: *Paola Subacchi*

ALL MEETINGS HELD UNDER THE CHATHAM HOUSE RULE