THE FUTURE OF WORK

This paper was commissioned by Esselte Corporation, to mark the hundred-year anniversary of the company's founding in 1913.

Its purpose is to examine the world of work, both current and future and to identify the challenges facing companies and individuals as they face up to the digital age.

When Esselte was founded, industry was only just coming to terms with office work as we recognise it. There were no calculators, the biggest companies employed large teams of typists, Tippex (the fluid for correcting mistakes) had yet to be invented, so any errors required starting again from the beginning, carbon copy or the printing press was the only way to create duplicates of documents, the telephone was available only to comparatively few.

We commissioned Futures House Europe, a scenario planning company specialising in envisaging the challenges facing organisations, to look at the world of work and its implications going forward.

This paper was co-authored by Richard Watson, a futurist and author of books such as "Future Files" and "Future Minds" and a regular contributor to "Fast Company" magazine and Andrew Crosthwaite, Richard's business partner and Planning Director of the London advertising Agency, BLAC. In addition to Esselte, Futures House works with London Business School, Nestle, KPMG, TUI and Save the Children.





A SHORT HISTORY OF WORK

"To compel a man to do day after day the same task, without any hope of escape or change, means nothing short of turning his life into a prison. Worthy work carries with it the hope of pleasure in rest, the hope of pleasure in our using what it makes, and the hope of pleasure in our daily creative skill."



So wrote William Morris in his work "Useful work vs. Useless Toil" in 1884. At that time, few people worked in offices, but the points he made about job satisfaction, the idea of being useful, of having one's creativity recognised and rewarded still resonate today.

The industrial revolution took people from the fields to the factories, so that during the 19th Century, industrial employment became more dominant than agricultural. The growth of mechanisation and assembly line construction brought practices that became reflected in office work as it evolved in the 20th Century.

Automation put an increased premium on skills. Tasks were divided between skilled and unskilled workers. The growth of companies from small entities to large organisations resulted in the development of a hierarchy of management to cope with the size of output. And with this came the creation of specialist functions like accounting, administration, sales, secretarial and personnel (then called welfare officers, concerned with the well-being of women and children in the workforce).

"In comparison with today, there was less talking and interaction and more focus on the individual task in hand"

The seeds of the modern office were sown.



The introduction of the typewriter and the adding machine in the 19th Century reduced the traditional role of the clerk and created a new tier of secretarial workers, nearly all women. Offices resembled factories in many respects – for overseers read supervisors. Workers carried out their tasks in a large room, while management kept a watchful eye on their performance from the comfort of personal offices.

By the mid 20th Century, office work was tightly controlled and defined. People often operated in mechanised production environments. In comparison with today, there was less talking and interaction and more focus on the individual task in hand.

The 80's and 90's saw new developments, with the advent of integrated IT and the cubicalisation of the workspace being most noteworthy. The workplace became (on the face of it) a more democratic environment, but still driven with a production-led mindset, with the focus on results and output.

As we look to the future, a lot of this is changing and may change faster than we think.

THE SOCIAL VALUE AND COST OF WORK

There's an old saying – no one went to their grave wishing they'd spent more time in the office. But work, or getting to work is somewhere we spend the majority of our waking lives – for many of us, much more time than we spend sleeping.

The average worker in OECD countries spends 1,776 hours a year working – ranging from 2,250 hours in Mexico (ironically not a country popularly associated with hard work) to 1,379 in the Netherlands.

Although official figures would suggest that the number of hours worked is in decline, the reality for most people in white-collar roles – especially in the private sector, would appear different.

In America, for example, according to the Department of Labor's American Time Use Survey, while the average full-time employee's workday has stayed consistent in recent years (at 8.4 hours), the proportion of people who work on the weekends has slowly increased to 35 per cent. Few office workers are on overtime to reward them financially for this additional effort.

As technology makes more and more people available 24/7, the boundaries between work and personal life will become increasingly blurred and it will be hard to see where one starts and the other begins.

"Presenteeism", resulting from specific company cultures or simply from fear of being seen not to be important or needed, results in countless office workers putting in unpaid overtime in the office, while still ostensibly working to defined hours. Others (or often the same people) see office work leaking into their home life, simply to keep up, or to compensate from economies and cuts.

Different people react to this in different ways. Younger workers, whose lives are increasingly defined by being "always on," by virtue of their evolving media usage, appear to adapt more easily. For older workers, the transition will be a challenge.



But crucially no one knows the long-term effects of being "always on" - findings published in 2012 by ComPsych Corp., a Chicago-based provider of employee assistance programs to more than 17,000 organisations worldwide, showed that 63% of their research sample say they have high levels of stress at work, with extreme fatigue and feeling out of control.

"The proportion of people who work on the weekends has slowly increased to 35 per cent"

Even 19th Century factory workers had their hours controlled – the 1878 factory act decreed that women were to work no more than 56 hours a week, for example. But today, especially in management roles, we see people working far beyond their contracted hours in an unsupervised and uncontrolled way.

Key issues:

Do we know what the new world of work is doing to us as people?

Do we recognise the potential effect of burn out on workers – often the most valuable and capable ones?

Do companies think of the potential future legislative implications of pushing workers too hard, or turning a blind eye to the workers' "invisible" out of office hours?



SHIFTING DEMOGRAPHY - AGING WORKFORCES

Nearly every developed country is getting older and this is translating itself into workforce profiles.

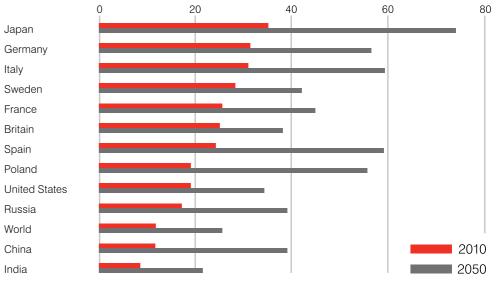
The chart opposite, based on European Commission projections shows that by 2050, over 65's will be the equivalent of around 50% of the working population of most European countries – and significantly higher



in Japan. This will be roughly double the 2010 ratio, which means we will see radical change from this point on.

Old-age dependency ratios

Number of people aged 65 and over as % of labour force (aged 15-54), forecast.



Source: European Commission

Countries will be left with the option of letting (or making) people work longer, incentivising increased birthrates, relaxing immigration policies or increasing productivity. Or, most likely, a combination of all of these.

"By 2050, over 65's will be the equivalent of around 50% of the working population of most European countries"

Between 1990 and 2010, the proportion of the workforce aged 55+ in Europe grew from 10% to 14%. This is likely to increase in future – possibly to 20% by 2020. Across the Western world, a combination of recession, poor savings records and the performance of stock markets mean that many people simply can't afford to retire.

In the UK, a survey by Canada Life showed that a third of people currently in work think they will work past the notional retirement age. In America, the Pew Research Center's Social Demographic and Trends has reported that half of all working adults aged between 50 and 64 plan to delay retirement and a further 16% believe they will never stop working. Increased standards of health will result in a core of people who actually want to keep on working for as long as they can. An outcome of this will be multi-generational workforces – ranging from Baby Boomers to Millennials, all working together, with different levels of successful cohesion, by 2020.

As the President of the Section for Employment, Social Affairs and Citizenship of the European Economic and Social Committee put it in a recent speech, "By far the most effective response to an ageing population in Europe is to make full use of available employment potential", but also added the important caveat "Work and management would have to be organised in a way that accommodated ageing at every stage of a person's career".

Key issues:

Companies in the future will be "multi-cultural", based on age mix and the consequent and sometimes conflicting expectations of the workplace.

They will have to develop policies to integrate a multi-generational workforce.

And also consider how to manage people who want to extend their careers, perhaps indefinitely.

SHIFTING DEMOGRAPHY - GENDER

Since 1970 the proportion of women of working age with paid jobs across the developed world has risen from 48% to 64%. This varies from around 50% in parts of southern Europe to over 70% in most of the Nordic countries – close to the figure for men.



As well as social change, there has been a strong economic effect - a recent study by the Economist estimated that the growth of women in the work force has done more for global GDP growth than the rise of China or new technologies, so countries have benefited from "hidden growth", often without realising it.

Looking further into the future, Goldman Sachs believe that eliminating the gap between male and female employment rates could boost GDP in America by a total of 9%, in the Euro Zone by 13% and in Japan by as much as 16%.

But significant disparities in opportunities and rewards remain – even in countries that apparently espouse equality.

"Companies with a high representation of women on the board outperform companies with all male boards by 41% in return on equity"

At the top, the so-called "glass ceiling", whereby women only rise to a certain point in companies remains. At time of writing, in Europe, only one in eight top companies have a female CEO and women make up only a quarter of senior managers and 10 per cent of board directors of the continent's largest companies.

Given that women graduates now outnumber men in virtually every country, it is unlikely (although not inconceivable) that this will continue, especially if recent legislation comes into force. In November 2011, European Union Justice Commissioner Viviane Reding introduced legislation requiring publicly traded companies across the EU to fill at least 40 per cent of board positions with women by 2020 – or be subject to sanctions. It remains to be seen how many companies will comply – or what these sanctions will be.

Some would argue that in addition to obvious reasons – such as taking time off to raise families, and so falling behind in the race to the top, that there are also hard-wired constraints to the rise of women in managerial roles. Research by the Institute of Leadership and Management suggests that women set their sights lower from the start, lack confidence (relative to men), are more cautious about applying for jobs and have less desire (some would call it ambition) to move up as they grow older.

And where men and women do equivalent jobs there is clear evidence that women's pay still lags behind that of men's and that the seeds are sown early. Linda Babcock and Sara Laschever, authors of Women Don't Ask, have calculated that if a woman doesn't achieve pay parity in her first job, she stands to lose more than \$500,000 by the time she reaches age 60.

Building on the evidence of women workers' contribution to GDP, there is evidence that the presence of a critical mass of women in senior jobs has a positive correlation with a company's individual financial performance. One study by McKinsey & Co called 'Women Matter' showed that companies with a high representation of women on the board outperform companies with all male boards by a factor of nearly 41% in return on equity. A similar study of Fortune 500 companies by Catalyst companies showed that companies with three or more women directors outperformed those with none by a 46% margin in ROE.

And taking softer measures into account, women's different values can be potentially of huge benefit to businesses as the way we work changes. Studies of gender in the workforce such as the Center for Work-Life Policy have consistently shown that women value flexible work arrangements and collaboration, are less naturally competitive or confrontational and take a more consensual approach to work and respond less well to traditional "Command and control", militaristic hierarchies.

In the past, these characteristics could be seen as weaknesses. But potentially women will be preferred in the job market of the future because of their higher levels of empathy, understanding and intuition.

And failing that, they will be driven to create their own businesses in response – something they are already more likely to do and incidentally are more likely to recruit women in the process.

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Key issues:

Women make up the bulk of first degree graduates and are responsible for at least 50% of decision-making in virtually every category, but are under-represented at senior level.

What can we do to unlock the potential of female management skills and potential?

Assuming an uplift in performance matching the McKinsey findings, what would be the effect on individual companies' finances of having greater representation of women at a senior level?

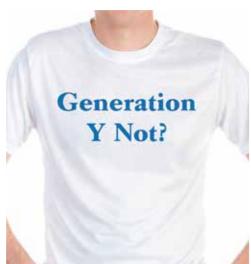
THEADVENT OF GENERATION Y AND MILLENNIALS

You have to be over 25 to remember life before the Internet and the growing influence and seniority of those who have grown up in a connected world will accelerate the pace of change.

Having experience of more technology than any other generation, this cohort should have a strong natural affinity with a knowledge-based world of work.

But as many commentators have noted, their values and approach to the workplace are different from their predecessors.





Pew Research called their study of Gen Y in America, "Confident. Connected.

Open to Change.", reflecting the perceived outlook and values that distinguish them.

But perhaps "Demanding Change" may have been a better descriptor. A global survey of Millennials commissioned by the Chartered Management Institute identified them as being more self directed - 68% wanted to initiate most of their own learning and development and decide how to blend their home life and work life so that they can work where and when they want.

Attitudinally they are more critical, more selective and in the eyes of many of their seniors, less grateful. Whereas the boomer generation was predisposed to give loyalty, they expect loyalty.

They have seen the world of work change, had experience of parents or grandparents being discarded as industries change or contract. And with a downward pressure on entry level salaries for all but the elite, stiff competition for jobs and fewer jobs in the market (often occupied by those who in their view should be retired or winding down), they want to play by different rules.

They view connectivity in and out of work as the norm; they often own more sophisticated equipment than their employer gives them and increasingly prefer to use their own at work. They are often better placed to solve IT problems than the people in that department.

They are impatient of what they would see as an out of date, paternalistic or autocratic attitude that pervades many businesses. In contrast they see their own futures as free wheeling and nomadic – a recent PwC study, "Millennials at Work" showed that of their sample, over a quarter now expect to have six employers or more in their work lifespan, compared with just 10% in 2008. 38% of those currently working said they were actively looking for a different role and 43% said they were open to offers. Only 18% expect to stay with their current employer for the long term.

"Gen Y are impatient of what they would see as an out of date, paternalistic or autocratic attitude that pervades many businesses"

And with youthful hubris, 38% felt that older senior management do not relate to younger workers, with implications for management style, as we will see later.

Key issues:

Do enough companies see Gen Y and Millennials as just new employees, or do we recognise their different needs and ambitions?

What might be the early warning signs of generational differences, and what policies can be put in place to prevent them?



THE FUTURE OF TALENT

According to Eurostat, the number of people available for work in Europe hit a peak in 2010 and is now falling and will continue to do so. Global birthrates have almost certainly peaked, as people have fewer children, later in life, so the conveyor belt of future generations cannot be relied upon.

The Employment Policy Foundation believes that the retiring bulge of baby boomers will leave a shortfall of 35 million workers by 2020, even taking into account the extended working lives referred to earlier. The World Economic Forum's "Global Talent Risk Study" also puts some numbers on this – suggesting the USA will need to add more than 25 million workers to its talent base by 2030 to sustain economic growth,

while Western Europe will need more than 45 million.

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Against the growing levels of unemployment that we are seeing as a result of the continuing financial crisis, this seems a contradiction. But the key factor is not just the number of available people, but the available talent.

Forecasts to 2020 by the European Centre for the Development of Vocational Training predict that the majority of future opportunities will come in the "high skills" segment of the workplace and this is reflected by Price Waterhouse Cooper's annual global CEO study, in which 97% of the sample cited access to talent and key skills was the most critical issue for their long term business strategies.

There is a common assumption that this is mainly a Western phenomenon and that the Far East and developing economies can provide a large talent pool for the world. However, a survey by Hays, the recruitment consultants among 900 companies in China, Singapore, Hong Kong and Japan showed that 95% of employers said skills shortages have the potential to hamper the effective operation of their business or department. ManpowerGroup's 2012 Global Talent Shortage Survey also showed that talent scarcities are most acute in the Asia Pacific region, especially in Japan, where an aging workforce is particularly problematic.

"Employees will increasingly see themselves as a "brand" whose marketing they have sole control over "

Solving the talent gap will depend on a number of factors. These will include the retention of workers with the right skills; the acquisition of workers who share these skills, or the capacity to learn them; making more efficient use of their time and contribution.

Clearly all companies will be competing in the global marketplace for the right people and for those with the right skills, the balance of power will shift to the seller, not the buyer. Increasingly the top companies will be hunting out the talent early – at universities where many have a strong campus presence, and even before, in the same way that football clubs have scouting networks looking for prodigies.

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No one will take security of tenure for granted and it is arguable if many do now – as even the most protected public sector jobs come under pressure in contracting economies. Employees will increasingly see themselves as a "brand" whose marketing they have sole control over. The "portfolio career" envisaged by Charles Handy will become the norm, rather than a theoretical aspiration.

The best will value training and personal development as more important than pay alone. They will see themselves on a multi-destination career journey, which will require a wide range of skills and competences to be built and constantly renewed. If their employer doesn't fulfil these needs they will find ones that do and/or seek out learning opportunities independently.

Because careers will be multi-company, multi-sector and non-linear, employees will take career breaks when it suits them. A gap on a CV will no longer be a source of suspicion, but the sign that the person has found something fulfilling to do outside the sphere of work.

As more and more transactional and routine roles become automated, people will be liberated to think more creatively. We will see the emergence of "expert thinkers", skilled in solving unexpected problems, carrying out complex communication interactions with other people. Intuitive thinking and emotional intelligence will be more important than knowledge as this will be easily accessible. But this will also be harder to measure by employers.

Highly sophisticated personality based software will increasingly be used by employers to spot the right sort of talent. The extent to which your values and personality fit with a company will be as important as your experience.

Remote working and mobility will remove traditional boundaries, and just as individuals will be able to work flexibly in time and location, so jobs will increasingly be globally available. High-level jobs will know no boundaries. A study by the UK Government's Department for Business Enterprise and Regulatory Reform showed that although the qualifications of German and British Engineers meant that 80% of graduates were globally employable, the figure for China was only 10%. But this must be set in the context of sheer numbers - 76,400 Chinese engineering graduates are globally employable compared to 8,600 for the UK.

And in the Western world we shouldn't simply think in terms of importing skills and people – the competitive hubs will be moving. Some companies are relocating their head offices on the basis of taxation (Google and WPP are both in Dublin), and the concentration of business is changing rapidly – of the Fortune 500 companies in 2012, 73 were based in China, against with just 16 in 2005.

Traditional job seeking and placement methods will be replaced by online marketplaces, of which LinkedIn, which has nearly 200 million members, will be seen as a prototype.

The awaited launch of Facebook jobs will fuse social networking and professional development closely together and has a potential pool of nearly 1 billion users (admittedly only a proportion of who will find this a relevant service).

Sites such as glassdoor.com and bestcompaniesguide.co.uk are already showing potential recruits what exists behind closed doors. This level of transparency will put pressure on companies to be ruthlessly open and honest about what they do as the disconnects will only become increasingly apparent.



Key issues:

Will connectivity mean that the largest organisations will find it even easier to find the best people available at the expense of others?

How can a company make itself a destination for top talent?

How can the skills gap be anticipated and addressed?

How do companies stop thinking local and start acting global?

THE RISE OF PART TIME WORK

Part time working has grown significantly in recent years in Europe, with the proportion of part time jobs rising steadily in most countries in the last 10 years from 15.8% in 2000 to 20.9% in 2011, according to OECD data. There is not a consistent picture from country to country - Switzerland, Norway, UK, Sweden, Denmark, Germany and Austria are all over 25% with the Netherlands highest at 49%.

A number of factors are involved here, including the increased number of women in work, but who still tend to shoulder the majority of family responsibilities; the rise of service industries; the desire of some to have flexible hours – especially older workers; cost cutting measures in companies who find a financial benefit in having a proportion of their workers on shorter contracts.

Conventional wisdom is that part time work is lower status work, but hand in hand with this has gone the disaggregation of higher status jobs – paralegals, paramedics, paraeducators (or classroom assistants), freeing up time for the most qualified to add the most value, make the most of their higher level skills.

But while giving some people the positive opportunity to make lifestyle shortages, the problems for companies are obvious. Giving people flexibility leads to organisational challenges.

People working part time have a higher rate of churn – because their work is temporary in nature or perception, or simply that they feel a lower level of loyalty

to the company, because they may feel less valued. Consequently they are less likely to become embedded in their company's ethos. The more organisations see themselves as inward and outward facing brands, the more significance this has.

"People working part time have a higher rate of churn – because their work is temporary, or simply that they feel a lower level of loyalty to the company"

Part time workers tend to be less skilled and developed. And in a world where skills resources are a source of competitive advantage, this will become more important. The 5th European Working Conditions Survey found a significant disparity between training for permanent employees and those employed on other arrangements: in 2010, 39% of permanent employees accessed employer-paid training, compared with only 26% of other employees.

Key issues:

Do companies view part time workers as a cheap alternative or a valuable resource to be treated equally?

What steps could be taken to ensure that part time workers are embedded in the organisation and share its vision and values?

THE IMPACT OF AUTOMATION

We have seen earlier how automation transformed factories and then had impact on the office workplace. "Robot" is derived from the Czech word meaning "compulsory labour" and the introduction of robots to the production line was originally hailed as a good thing (except by people whose jobs they replaced).

An automated world would free up more leisure time, or so we believed, allowing us to fulfil ourselves in different ways – and we didn't envisage this would include working at the weekends.



But from physical production, automation is increasingly taking a central role in all aspects of the workplace, impacting on administrative and transactional work. As the New Commission on the Skills of the American Workforce recently concluded, "If work is routine, no matter how complex it is, chances are it can be automated."

"The Al [Artificial Intelligence] revolution is doing to white collar jobs what robotics did to blue collar jobs "

The authors of "Race against the machine" predicted that, "The AI [Artificial Intelligence] revolution is doing to white collar jobs what robotics did to blue collar jobs.... And computers (hardware, software, and networks) are only going to get more powerful and capable in the future and have an ever-bigger impact on jobs, skills, and the economy."

This is nothing new - US Bureau of Labor data shows that between 2000 and 2009, 5 million interaction jobs (law, nursing, service) were created. And at the same time, 3 million production and office based transactional jobs vanished. So arguably we are seeing a gradual upwards migration of work. But what we will encounter in future is not just change, but accelerating change.

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Increasingly, Al will come into play in jobs and functions that involve complex interactions and knowledge-based decision-making. Cars will be self-driving. We will become accustomed to Al-based medical diagnoses. We may consult Al lawyers for guidance. Human interaction can feasibly be taken out of estate agency. Workers will be able to interact with virtual HR departments. Which probably means that anyone reading this piece has a chance – indeed a likelihood of at least part or even their entire job being taken over by technology in the future.

Alan Turing proposed a measure to determine whether or not a machine has gained the power to think for itself – the "Turing Test". The Loebner Prize of \$100,000 is the reward for the first "chatterbot" that judges find indistinguishable from a real human across a number of dimensions – and is yet to be won.

But inevitably it will be – and then replicated. So the big question will be how the world of work – and the world itself – will adapt to the subsequent challenges, whether people can keep up with change.

Key issues:

What parts of your business are suited to being automated – and in which areas might you have no choice?

How can talent be best deployed to make sure that creativity is most effectively achieved?

MOBILE WORKING

In the past, the majority of white-collar workers were office-bound, with only sales staff regularly off site. The possession of an office, its dimensions, location and furnishings, were a measure of seniority and influence.

Now the projection is that by 2015, the world's mobile worker population will reach 1.3 billion, or nearly 40% of the total workforce, according to IT analytics firm IDC. We are seeing and experiencing an inexorable shift to partial or total mobile working.

This has a number of drivers - new technology, the desire of forward thinking companies to improve employee satisfaction, reduce costs and be more responsive to customer needs inside and outside "office hours." And importantly the recognition that a needless 5 days a week commute is a waste of resources.

Where we live is becoming increasingly urbanised. By 2050 it is estimated that 80% of the world's population will be city dwellers. As more people live in cities, so commuting becomes an issue. Workers in Thailand have the longest commutes in the world, with an average of 2 hours a day – a potential saving of an entire working day a week by working from home. The average speed of travel in Bangkok is just 7mph during peak hours – or jogging pace. This is clearly not sustainable in any sense of the word.

Rather than work is where the office is, for mobile workers, it is where you are – whether it is at home, in the car, in an airport, a service station, a coffee shop or the office of a client. Or on your holiday.

So in the future, many workers could be operating in a fluid ecosphere, interacting with people in different spaces on a permanent, temporary or ad hoc basis. The Cloud for them will not refer to a storage system, but a virtual hub, accessed by a mobile, semi-structured workforce.

Mobility suggests ease of movement, but ironically, the more mobile people become, the more devices they are carrying with them - the so-called "mobile stack" (average number of devices carried by a mobile worker) has grown to 3.5 in 2012 up from 2.7 in 2011 – nearly all down to the growth of tablets.



The benefits for employers are obvious and the savings for companies of encouraging mobile working can be considerable – if eligible workers stayed home, businesses could save more nearly \$8,000 annually for each telecommuter, according to "Workshifting Benefits: The Bottom Line."

But while the company potentially enjoys cost benefits and the employee enjoys (in theory) a more flexible lifestyle, there are also significant issues. Work has a value beyond financial reward for many, if not most people. We are social animals who depend on interaction with others for our stimulation.

An IBM European study, "The Mobile Working Experience" showed that people who regularly work remotely from the office report problems with collaborating and communicating with others, with half the sample complaining about this.

Dell's "Evolving Workplace" study found that more than one third of global workers perceive remote working as 'eroding team spirit within the workplace' (36%). This is of particular concern in Germany (55%).

And building on the points made earlier on the hours that many people work, mobile workers could be worse off than those who are office bound – and at least visually accountable. A survey of mobile workers by Sheffield University's Institute of Work Psychology and Management, conducted for iPass, found that over 25% of respondents believed they were working an extra 15 – 20 hours a week – because technology enabled (or forced) them to do so.

"Rather than work is where the office is, for mobile workers, it is where you are — whether it is at home, in the car, in an airport, a service station, a coffee shop or the office of a client. Or on your holiday"

And more hours worked do not necessarily lead to greater efficiency or fulfilment. The same survey shows that mobile workers are more prone to multi-tasking than office based ones – handling on average 3 – 4 tasks simultaneously – and a third of these feel less effective as a result.

Totally mobile working will suit some functions and individuals more than others, but what is inevitably missing is the social dimension – this isn't simply office gossip, but more importantly access to the informal interactions, which are increasingly important as work becomes more collaborative.

From the employer's point of view, in addition to monitoring performance and activity, ensuring that people throughout a company understand and live the values of the organisation will become more difficult, the more physically detached employees are. As companies think of themselves as brands, often differentiated by cultural beliefs and style, the more this detachment may become significant.

Key issues:

Is mobility a benefit to the way individual companies do business, or a hindrance?

How can we ensure that mobile workers are both efficient and accountable, with benign controls in place?

Mobility is supposed to promote work life balance, but can actually lead to greater burdens – how can companies offset this?

WHAT WILL OFFICES BE LIKE IN THE FUTURE?

The traditional office-based model is clearly dying. A small number of organisations will remain office bound for a variety of reasons, but they will be small in number. These will include those where security is paramount (think GCHQ, the UK government's security intelligence centre), places where face to face customer service remains important and those where personal interaction on the premises is paramount, such as hospitality and retail, although some restaurants in the Far East are experimenting with robotic waiters, taking orders, serving and processing payment.

Many offices are on a journey from cubicle to open plan to something more zoned and flexible. As more and more people become mobile workers, offices will resemble places to meet up and interact, rather than fixed bases. And offices will have to work harder, like their inhabitants – office space utilisation is expected to have increased from around 50% to around 75% between 2010 and 2015, according to research for Jones Lang Lasalle, with implications for peoples' natural territorial instincts.

The environments will be multi-functional, reflecting new ways of working, combining fixed workstations, quiet areas, informal social areas and more formal meeting environments. Modularity will be an important facet of office design.

Office architects will need to show a close understanding of the vision and values of the companies they work for and create spaces and environments that meet these.



American Express is an example of a company that has zoned its offices according to four individual working typologies and we may expect a far greater level of tailoring within companies in the future.

Large cities will be populated with spaces to provide "pop up" offices, where companies can temporarily locate project teams. These will also be used by micro organisations and stand alones who want to be surrounded by companies that are like them. This will evolve organically in line with the changes to organisational structures.

Technologies will be embedded in office spaces so that they will be responsive to the moods of employees and adjust lighting, temperature and ambient noise accordingly. Although everyone will have mobile devices, the office structure will work in plug and play mode – so that all of the resources an individual wants are available anywhere in the building.

"Technologies will be embedded in offices so they will be responsive to the moods of employees and adjust lighting, temperature and ambient noise accordingly"

Instead of having to find meeting spaces, literally anything will be capable of being a screen, so that desktop monitors and presentation projectors will disappear and be replaced by intelligent glass - or simply nothing. And maybe the 3.5 device "mobile stack" that we carry with us will start to shrink.

Telepresence will be the norm. Employees working remotely will be able to send hologrammatic versions of themselves to take part in meetings and conversations. So telephone based conferencing, with the feeling of detachment and disempowerment will be a thing of the past. Equally formal video conferencing will be replaced by hologrammatic get togethers. And at a more causal level, people will be able to drop in to meetings elsewhere in the building without having to leave their desk – assuming they have one.

But virtual presence will be at the expense of real personal interaction. So the question remains - will they really be a substitute for the real thing and solve the feelings of detachment that many mobile workers feel, outlined earlier?

Key issues:

How many offices are fit for purpose in a world of rapidly changing working practices?

How can we ensure that people working remotely actually feel part of a greater whole?

Do we build enough "flex" into the way our workplaces are organised or are informal social areas seen by management as unproductive space?

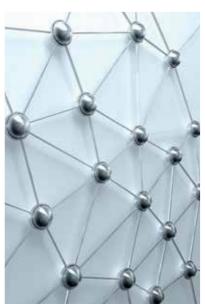
To what extent can we work as virtual presences, without the reassurance of physical presence?

THE FUTURE STRUCTURE OF WORK

The way organisations are structured is changing and we will see more large, interlinked total service companies and more small independent specialists, while companies in the middle will struggle as they will neither have the scale and resource nor the agility to compete effectively on either front.

Rather than being self-contained, they will operate more as part of a larger, fluid eco-system, arranged around the work they do, not just fitting the work into inflexible structures, as has been the case in the past. Instead of layered management and rigid departmental siloes, expensive, slow moving and less responsive to the complex needs of tomorrow, there will be greater cross-functional co-operation, using the mixture of talents within (and outside) the company to solve problems and capitalise on opportunities quickly.

As seen previously, there will be fewer full time employees in most companies and talent will be imported when it is needed. This will lead to more opportunities for specialist consultancies and individuals hiring themselves out on short-term contracts as higher-level temporary staff.



In addition to this there will be more formal and informal joint ventures – companies teaming up with like-minded organisations for mutual benefit in strategic alliances. These will not always be commercial enterprises and we will see universities and colleges aligning themselves with businesses to generate income.

All of these changes will impact on management and work culture. In 1960, Douglas McGregor identified two approaches to management – X and Y. X style management is command and control, top down, bureaucratic, formal and often aggressive. Y school is more collaborative, based on teamwork and participation.

Although dominant in corporate structures of the past, the X approach will seem increasingly outmoded in the workplace of the future and higher performers and Gen Y and millennials will choose to work where it is the cultural norm as a last resort – simply because it doesn't fit with their values and aspirations.

"The employee of the future will be judged more by the quality of output rather than the number of hours worked"

As we have seen, managers will be as, if not more, likely to be she than he and there will be a shift of values in companies as a result. The attitudes of these more recent entrants into the workforce will be particularly influential. The global CMI study referenced earlier showed that Millennials want to work for companies that do something they believe in. And by definition this will extend to management style. This doesn't mean that work will be a holiday. The pressure to succeed will still be there, but it will be delivered in different ways.

Rather than managing by objectives, companies in future will increasingly manage by results. At the moment, in many companies, being seen to be doing something is more important than the actual output – hence the culture of presenteeism referred to earlier in this piece. In the future, the quality of output will be all and management will need to find new ways of measuring this – productivity will be prized above simply being there and being seen to be doing something. Dell's "The Evolving Workforce" predicted that the employee of the future will be "Judged more by the output and indexed towards quality of output rather than the number of hours worked."

But the problem remains of how this output will be evaluated in a knowledge-based market structure, where creativity and innovation can be subjective terms.

Companies will need to contend with greater transparency in future. The growth of sites like glassdoor, will make information about culture, conditions and salaries in companies even more widely available. Customers will demand and get easy access to information about the people that they buy from.

Social media will be a driver and an enabler of this and migrate from being thought of as a purely personal tool to one that is central, not just for business to consumer, but business-to-business communication.

In the UK, the addresses of MI5 and MI6, the government's security services are widely known – as is the identity of the Director General – unthinkable a generation ago. Rather than only being recruited through subterfuge, employees are openly sought on the Internet – especially hard to reach groups, such as ethnic minorities. In the USA, the CIA markets itself as an employer online in a way no different from General Motors does.

Internal openness and co-operation will be provided by internal social media innovations designed to help people work and communicate more collaboratively, across functions and geographical boundaries. IBM's Social Blue is probably the leading instance of this.

But once the window is open, companies can't simply draw the curtains – and the inflow and outflow of information has to be managed.

Key issues:

Companies must stop thinking in terms of being stand-alone entities and more as being collaborative partners in a business ecosystem.

How will output be evaluated in a knowledge-based market structure, where creativity and innovation can be subjective terms?

How can "command and control" style managers be encouraged to loosen the reins – or will they die out, like dinosaurs?

How can companies put the cultural building blocks in place to be more open?

HOW WILL COMPANIES ORGANISE THEMSELVES IN THE FUTURE?

In a creative and knowledge based work environment, access to information will be critical. Speed and accuracy will be competitive advantages, but for most people at work, events, other people and most importantly, their everyday communication tools, combine to sabotage delivery. We are nowhere as efficient as we think or would like to be.



McKinsey estimate that an average interaction worker spends 28 per cent of the working week managing e-mail and nearly 20 per cent looking for internal information or tracking down colleagues who can help with specific tasks. Another piece of work by Fonality in 2012 showed that in the average

8 hour day of an office worker, nearly 3 ½ hours are spent trying to contact customers or colleagues, trying to find information, duplicating communication, trying to schedule meetings or dealing with unwanted or irrelevant communication.

E-mail has been criticised for years for being indiscriminate, unwieldy, visually uninvolving, ambiguous, but no replacement is on the horizon. Twitter's 140-character limit prevents detailed communications, and Facebook offers businesses little in the way of a secure alternative – or reliable archiving.

A study by Professor Perling of Harvard Business School among Boston Consulting Group Consultants implementing "Predictable Time Off" (turning off email and mobile devices for fixed periods) resulted in participants feeling more motivated, with increased job satisfaction. They also reported that they had become more efficient, effective and collaborative as a team.

"The retrieval of information is likely to become harder, not easier in future"

The reality is that despite the likelihood of disaggregation of higher status jobs referred to earlier, what we view as high level workers are spending a large part of their time on administrative tasks, hunting and processing information about which they are poorly equipped to assess the value until they have seen or read it.

These people are leaders, thinkers and doers all rolled into one. But the problem is that the doing part is time consuming and always has an apparent urgency. So there is an emerging "organisational gap" which will threaten all of the apparent efficiencies that mobility and digital communication are bringing.

Organising people in the office of the future will be far more challenging than it is today. It is fine empowering workers to make their own decisions about work flow and place and pace of work, but ultimately this needs to be managed – especially with the increase in part time, freelance and outsourcing.

Resource coordinators will perform a more integral service by composing teams from different departments and outside organisations and blending them together. Their knowledge of the right and best external skills will give companies competitive edge and will add a new dimension to the services offered by recruitment and placement suppliers.

Workflow coordination will become a key function, interacting with clients, allocating projects to the right teams to ensure that tasks are dealt with efficiently, managing the relationships between insourced and outsourced workers. In a world where multi-tasking will be the norm and projects are no longer linear, this will require high-level skills and software.

And it isn't just the people who need organising – it is their equipment. The speed of change means that only companies ditching their technology wholesale on an annual basis will be sure that everyone is capable of working on a level playing field.

The retrieval of information is likely to become harder, not easier in future, as companies hold storage in ever-greater quantities. Physical storage of paper-based information is falling – from over 10% to perhaps less than 1% of office space. But something has to take its place.

The availability of enough digital data storage capacity is vital. Insufficient space may mean that some items simply are not safely stored. So information will have to be compressed and still remain searchable, retrievable and capable of being easily analysed and manipulated.

Digital filing will increasingly be a challenge, as information comes in different digital forms. In future rather than the printed word, we will increasingly be creating, managing and restoring all different formats – from tweets to webinars to filmic materials.

How do you file and retrieve an infographic? Traditional hierarchical filing approaches can lead to the retrieval of irrelevant information, or to none at all, even though the information exists as Jackson and Smith's 2011 study for Loughborough University shows. Desktop assistant apps to address this type of challenge will grow in popularity – there are already 500 available, but most are simply time management systems that the user has to fit themselves into, rather than vice versa.

But just as computers don't think like us (yet), we don't think like them. As David Allen, the "Getting Things Done" guru told Fast Company magazine, "Could somebody, some system, please embody my intelligence about how I want to have data structured and how I want it to come out?" A fundamental problem is that no storage method is really intuitive. Human brains don't work like filing cabinets or like computer servers. The standard hierarchical structures have logic to them, but most people's thinking – especially their creative thinking, lacks logic.

So the ideal data storage systems of the future will be both logical and intuitive – a bit like a gearbox that we can shift from manual to automatic.

Key issues:

The time wasted in inefficiencies at work is huge and yet often passes unnoticed.

Companies must beware of devaluing their most valuable people by turning them into their own administrative assistants.

Data retrieval will be key and old approaches to filing must evolve.

The challenge remains – how to make our information organisation intuitive and mirror the cognitive structures of the people who use it?

HOW WILL WE SAFEGUARD OUR INFORMATION IN THE FUTURE?

So just as peoples' work and personal lives become blurred, so will their professional and personal information.

An increasing issue surrounds the whole idea of whose technology is it anyway? "BYOD" or bring your own device is becoming embedded in many companies – especially with younger workers, who usually own more up to date equipment than their company provides for them and will want to use it in preference.

Security will become vital. Mobile devices are taking over from computers as a means of accessing the web – but not necessarily with the same safeguards. And with mobile phones the most frequent item of lost property on public transport globally, data security is problematic. Quite simply, the more devices there are, the less controlled they are, the more casually they are disposed of. So companies will develop bespoke encryption techniques to protect data on the move.

The Cloud will grow in popularity but reservations will remain. Restrictions on the storage of medical and financial data will remain in theory, but are unlikely to meet total compliance. And security will remain an issue: it is one thing losing your own data or having your security breached, it is different when someone else does it. In mid 2012, Dropbox admitted that passwords and data from some user accounts had been compromised – probably not the first or last time this sort of thing will occur.

So wise companies will choose to use the Cloud – as we are encouraged to do with financial services – spreading our risk between providers.

As Cloud customers, companies relinquish more control than they often realise. Few users are probably aware that data stored in the EU is subject to EU law; data



stored in the U.S. is only subject to U.S. law. And the two are quite different. German companies are legally prohibited from storing data outside the EU – but many do, knowingly or unknowingly.

"Mobile devices are taking over from computers as a means of accessing the web – but not necessarily with the same safeguards"

As data and information expands, it is likely that companies will see multiple tiers of importance – information that needs protecting and being kept secure at all cost, information on a need to know or internal basis, and information that is openly shared in the wider world. This latter segment may be partly philanthropic – in the same way that not for profit companies like Mozilla operate, but also as another facet of Corporate Social Responsibility.

Key issues:

Companies will have to meet the challenge of being open, flexible and also secure.

Too much information is potentially too readily available to the wrong people.

Just as we will be working in global markets, so our intelligence will move around the globe – often uncontrolled and subject to, and often contravening local legislature and policies.

DOES PAPER HAVE A FUTURE IN BUSINESS?

While software companies are eager to predict the death of paper, there is no evidence that anything more than a gradual decline will happen in the near future. Rather, the huge growth of information that we consult and process means that it is paper's share of information content that is falling rapidly.

The "paperless office" was coined in an article in Business Week in 1975 – and nearly 40 years later it is a rare company that works in this way and the average office worker is still estimated to use 10,000 sheets of paper a year – consistent findings across USA, UK and Australia (but significantly around 60% of this and growing is recycled).

"So it is likely that both paper and digital will co-exist for some time yet"



A survey of 200 companies by the printer supplier Lexmark showed that only 43 per cent of those surveyed believe in the 'paperless' office concept, but think it's unlikely to happen, while a third believe modern operations will prevent the idea being implemented.

While ¾ said they were printing off fewer emails hardly anyone was printing none at all. So although people may be learning to be more selective, old

behaviours remain – maybe because people find paper easier to read and retain more information, as some studies (not carried out by computer companies), have suggested.

So it is likely that both paper and digital will co-exist for some time yet, giving new challenges to companies as they look for ways to convert paper documents into electronic files for immediate distribution, processing, indexing, storage or archiving. And for many documents, the look, feel, quality of a paper-based presentation will always outweigh a digital equivalent.

Key issues:

The place, where paper and digital meet, is a focal point that few companies are addressing.

The challenge will remain for years to come of how to manage thousands of gigabytes of data and the 10,000 sheets of paper that an office worker produces every year.

Paper may be in gradual decline, but embedded needs and behaviours do not change overnight.

THE INNOVATION PROCESSES THAT COMPANIES NEED TO START IMPLEMENTING NOW

The science fiction writer William Gibson famously remarked that "The future is already here — it's just not very evenly distributed."

The lesson for all of us is that on the whole the future doesn't arrive in one handy lump, it comes in drips and drabs – hence the unevenness of distribution. Ironically there are benefits in being a laggard. Africa is going through a mobile revolution faster than the rest of the world, precisely because there is so little infrastructure to lose and no legacy costs to be regretted. Apple did not produce the first MP3 player on the market – but they produced the most aesthetically pleasing and the most intuitive.

But organisations in the developed world that sit back and wait for something to happen will find themselves engulfed in a tidal wave of change. If we simply look 10 years into the past and realise that Generation Y, the attitudinal driver of change, was still at school, that broadband was only just being introduced and a mobile worker was likely to be someone who drove a bus, we can see how quickly the world has moved.

Now look ahead 10 years, bearing in mind that the speed of technology is always accelerating, and we have to recognise that the business world we take for granted now will bear no relation to the one of 2020 and beyond. And unless you intend to retire by then (and remember the half of all US workers who plan to delay retirement) it is a world that you will have to confront.

"Organisations in the developed world that sit back and wait for something to happen will find themselves engulfed in a tidal wave of change"

So we will all have to become more innovative in our orientation – and not just in terms of new products, but in terms of through the business thinking. We have seen innovation go through a number of phases – by lone boffins, by 'skunkworks'* in larger companies, by teams of individuals backed by venture capital. The future will lie in holistic business innovation.

Rather than an isolated function, it will have to be something that everyone will be involved in. This goes beyond having a suggestions box (usually empty and ignored), to making sure that forward thinking is in companies' DNAs.

Innovation will be more internally collaborative. We have talked in this piece about the growth of project teams and cross-departmental working. This will be reflected in innovation practices – there are many studies showing that the wider the range of disciplines involved in idea generation, the more powerful the concepts that come out as a result, because people working together in this way approach problems from different angles, not with blinkered thinking.

Innovation will be more open. Of course companies will keep proprietary information and much patent development work will be carried out behind closed doors. But at the same time, enlightened organisations will share their thinking at an early stage with their channel partners in the ecosphere referred to earlier. By working synergistically together, companies will be able to exploit mutual strengths in collaborative partnerships.

More and more companies will use open source as a way of developing products and services – using their customers and suppliers as participants – a recent high profile example was the way the Guardian newspaper drew on its readership to help the rapid analysis of the report on the misuse of MP's expenses in the UK, with 170,000 documents reviewed by 20,000 contributors.

Innovation will also be collaborative with customers. Early in 2012 Unilever set up the "Sustainable Living Lab", a 24-hour global online event designed to generate new ideas from customers. This was on the back of a permanent online platform called Open Innovation. As well as generating ideas, this type of initiative delivers a "win - win" by creating goodwill among people who feel they are making a contribution to how a company does business. So insight and foresight, not the rear view mirror of conventional research will become increasingly important.



Just as in software development, companies will carry out far more beta testing of ideas. And this whole area will explode when 3D printing becomes more mainstream and limited edition prototyping will be simple.

While the focus in the past has been on products – NPD or new product development is synonymous with innovation in most peoples' minds - business model innovation will become more important and a way for companies to gain competitive advantage. Where products can often be swiftly copied, the commercialisation of business models can be more bespoke to a company's values and outlook as another extension of its brand behaviour.

Innovation will not be something that companies can dip in and out of. It must be hard wired into the organisation as a systematic capability and championed by senior management. Seen as an essential investment, not a cost to be trimmed when the going gets tough.

Companies that are stuck in a rut will suffer. With the growth of the global economy, organisations that are flourishing in developing economies are playing by different rules, taking a zero based approach, fitting themselves to the emerging world picture rather than hoping that the world will adapt to them.

Key issues:

With changes in markets, with different employee profiles, with a new connectivity, with new technology, with new mobility, an innovation process that is open, accepts risk and is central to how a company does business will not be an option. It will be the difference between success and failure, between survival and extinction.

WHAT THIS MEANS FOR ESSELTE

At Esselte we are committed to help companies embrace a digital future – but to do it productively. To take into account some of the changes outlined in this document and ask ourselves – "What does this mean for our business?"

Although we will continue to produce solutions in the world of paper – helping mobile workers use it easily and conveniently, making sure that vital documents are secure, adapting desktop tools to the modern office environment, we will be directing the bulk of our future R&D to this point where paper and digital meet with products such as Leitz Cloud and Leitz Complete, because making this work is at the heart of being a productive, organised company.

We have restyled ourselves "Innovators in Organisation". Helping people be organised is our core competence - it is in our DNA. Our earliest product, the LAF was designed to solve an organisational problem.

We have been producing products with similar aims ever since: to help people be organised, to help them be in control.

OUR CREDO

Organisation means everything is where it's needed

Good organisation means everything falls into place. It prevents repetition, delay, confusion and ultimately, frustration. It enables speed of action, safety from loss of information and allows the creative mind to lift up towards the new.

Organisation isn't bureaucracy

Organisation shouldn't be confused with bureaucracy, which often becomes a deadening force and simply feeds itself. Some people reject the idea of organisation and believe there is freedom and creativity in chaos. They are misguided.

Organisation is liberation

Good organisation is the opposite of restriction: it facilitates freedom of action. We define it as the creation and maintenance of a system that enables a smooth and efficient interplay between objectives and achievement. At its heart is freedom.

Organisation has never been more important

In a world where paper-based and digital information exist side by side, there has never been a greater need for an open minded and innovative approach to organisation.

Organisation is the fusion of digital and physical

Paper based suppliers pretend the digital revolution isn't happening.

Digital companies pretend no one uses paper anymore.

Both are wrong.

Esselte believes that both formats need to find a way to exist to their mutual advantage.

In a world where paper and digital meet we are Innovators in Organisation

