

FORCES
SHAPING
THE FUTURE
OF WORK

LYNDA GRATTON INVESTIGATES: THE FUTURE OF WORK

Work is universal. But, how, why, where and when we work has never been so open to individual interpretation. The certainties of the past have been replaced by ambiguity, questions and the steady hum of technology. Now, in a groundbreaking research project covering 21 global companies and more than 200 executives, Lynda Gratton is making sense of the future of work. In this exclusive article she provides a preview of the real world of 21st century work.

You may be a Baby Boomer in your 50s with Gen Y children just joining the workforce; an alumnus of a business school, a 40-year-old Gen X preparing for 30 more years of work, with young Gen Z children; or an MBA student thinking about the years of work ahead of you.

Whatever your age, one of the most crucial questions you face is how the

future of work will develop and the impact on you and the organisations of which you are a member. If you are now aged 30, you can expect to work for the next 40 years — that means in 2050 you will be a member of the workforce. If you are 50, you can expect to be actively employed for another 20 years — that's 2030. If you have young children, they could be working until 2070.

Work is, and always has been, one of the most defining aspects of our lives. It is where we meet our friends, excite ourselves and feel at our most creative and innovative. It can also be where we can feel our most frustrated, exasperated and taken for granted. Work matters — to us as individuals, to our family and friends and also to the communities and societies in which we live.

Many of the ways of working that we have taken for granted for 20 years are disappearing — working from nine-to-five, aligning with only one company, spending time with



PLANNING FOR THE FUTURE: GRATTON



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family, taking weekends off, working with people we have known well in offices we go to every day. And what’s coming in its place is much less knowable and less understandable — almost too fragile to grasp.

Facing the future

Over the last two years, my mission has been to understand how work and organisations will evolve. What I wanted was not firm predictions, since I know these are notoriously unreliable, but rather a point of view, a basic idea of what the hard facts of the future are, and a way of thinking about the future that has internal cohesion. I wanted to discover, with as much fine-grained detail as possible, how the future of work is likely to evolve.

Why it is so important now, to at least attempt to paint a realistic picture of the future, is that we can no longer imagine the future simply by extrapolating from the past. The past six generations have experienced the most rapid and profound change mankind has experienced in its 5,000 years of recorded history. If the world economy continues to grow at the same pace as the last half-century, then by the time my children are the age I am now — in 2050 — the world will be seven times richer than it is today, world population could be over 9 billion and average wealth will also have increased dramatically.

We live at a time when the schism with the past is of the same magnitude

as that last seen in the late 18th century. A schism of such magnitude that work — what we do, where we do it, how we work and with whom — will change, possibly unrecognisably in our lifetime. In the late 18th century, the drivers of this change were the development of coal and steam power. This time around it is not the result of a single force, but rather the subtle combination of five forces that will fundamentally transform much of what we take for granted about work: the needs of a low-carbon economy, rapid advances in technology, increasing globalisation, profound changes in longevity and demography and profound societal changes.

It is not just our day-to-day working conditions and habits that will change dramatically. What will also change is our working consciousness, just as the industrial age changed the working consciousness of our predecessors. The industrial revolution introduced a mass market for goods and with it a rewiring of the human brain towards an increasing desire for consumption and the acquisition of wealth and property. The question we face now is how the working consciousness of current and future employees will be further transformed in the age of technology and globalisation we are entering.

What is inevitable is that, for younger people like my two sons, work will change dramatically — and those of us already in the workforce will be employed in ways we can hardly imagine.

The wise crowd

To better understand the future of work, from October 2009 to May 2010 I led a research consortium of 21 companies and over 200 executives from around the world. The major business sectors were represented by a wide array of firms, including Absa (the South African bank), Nokia, Nomura, Tata Consulting Services (TCS), Shell, Thomson Reuters, Novartis and Novo Nordisk, SAP, BT and Singapore’s Ministry of Manpower, as well as two not-for-profit organisations, Save the Children and World Vision. My colleagues, Dr Julia Goges-Cooke and Andreas Voigt, also took part.

The consortium community met initially in November 2009 at London Business School where we looked closely at the hard facts of the future, then took the conversation into their own companies. We were able to work together virtually in an elaborate shared portal and also to discuss the emerging ideas in monthly webinars — and later in a series of workshops in Europe and Asia. At the same time, I tested out some of my initial thoughts by writing a weekly blog (www.lyndagrattontofutureofwork.com) on which a wider community commented. It was these ideas, insights and anxieties that became stitched into storyline narratives and brought depth to our conversations.

What excited the community was finding answers to three questions:

- How will external forces shape the way my company and its people develop over the coming decades?
- How best can we prepare for these developments to ‘future proof’ the company?
- What can we learn from others about where to focus our attention and resources, what will be tough, and what will be more straightforward?

Working it out

How will these five forces affect the way we work in 2025, and what does this mean for the choices and actions we should be taking now? My research and conversations about the future of work have led me to understand that the future will be less about general skills and more about in-depth mastery; less about working as a competitive, isolated individual and more about working collaboratively in a joined world; and less about focusing solely on a standard of living and more on the quality of experiences. Here are the ways I believe these three shifts will play out in our lives and the lives of others.

The shift to mastery I believe that in the future the means by which individual value is created will shift from having generalist ability to having specialist ability and achieving serial mastery. Why? Because if you remain a generalist, there are thousands, perhaps even millions, of people who can do the same work as you do — yet faster, cheaper and perhaps even



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FIVE FORCES



01

One of the first tasks of the research was to identify the external forces that will fundamentally change the way that work will be done by 2025.

We determined that five forces will be crucial:



02

01 ▶ TECHNOLOGICAL DEVELOPMENTS



Technology will influence the size of the world population and life expectancy and will influence our working lives in other deeper and more indirect ways — the way we engage with others, our views on morality and our own human nature. You don't have to be a supporter of technological determinism to recognise that technological capability (through its complex interactions with individuals, institutions, cultures and environment) is a key determinant of the ground rules within which the games of human civilisation get played out.

By 2025, we can expect that more than five billion people will be connected by mobile devices, the Internet 'Cloud' will deliver low-cost computing services, an increasing amount of work will be performed by robots and self-created content will join the digitalisation of books to create an unprecedented amount of information in the world knowledge net. We can expect that, across the globe, billions of cognitive assistants will be collecting information, monitoring people's behaviour and taking actions from their preferences. This massive crowd of computers is becoming increasingly capable of learning and creating new knowledge entirely on its own and with no human help.



03

02 ▶ GLOBALISATION



The combination of technology and globalisation will have a profound impact on the way we work in the future. While many of the new poles of economic activity are in the Big Six emerging economies (Brazil, China, India, Mexico, Russia and South Korea), the economies of next-wave locations such as Egypt, Nigeria and Turkey are increasingly important. These emerging economies will increasingly add value through innovation as well as low-cost manufacturing. Greater numbers of people will choose to move to the mega-cities of the world, and new talent pools will emerge in areas across the globe where the population is connected to the world knowledge net. Much of the world will become joined — both in terms of trade in goods and services, the mobility of labour, the opening up of new talent pools and in the extent of global connectivity.

Globalisation will bring opportunities for talented and energetic people to become part of the world economy wherever they are born. It will also increase the exclusion of those who are not part of the global market, either because they don't have access to broadband or because they have neither the talent nor the energy to compete.





- 01 Older for longer
- 02 Fathers are increasingly involved
- 03 Wind power

FIVE FORCES



01



02



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03 ▷

DEMOGRAPHIC CHANGES



The new demography will reshape our understanding and expectations of work. In many ways, the coming decades will be defined by the largest demographic group the world has ever seen — the Baby Boomers. In 2010, they are in their 50s and 60s; and by 2025 most will have left the workforce, taking with them a huge store of tacit knowledge and know-how as well as, if some commentators are to be believed, much of the wealth of the next generations.

The future will also see unprecedented increases in life expectancy. There is a strong possibility that many of the healthy children born in 2010 will live more than 100 years, as will some of those currently in their 20s.

This will fundamentally bring into question our current assumptions about retirement, about the employment of the over-65s and about the provision of pensions.

04 ▷

SOCIETAL TRENDS



The mental life of human beings has been transformed by developments such as language, literacy, urbanisation, division of labour, industrialisation, science, communications, transport and media technology. These changes will continue over the coming years. By 2025, we can expect that people will be more individualistic and increasingly prepared to forge lifestyles based on their own needs rather than societal expectations. At the same time, we can expect trust in business and business leaders to continue to plummet.

I predict that, in 2025, many people will live their lives alone or in small family groups and some of these relationships will become more virtual. It will increasingly be the norm to work much of the time from home or in small community hubs to avoid the carbon costs and general wear and tear of lengthy commutes. Most employable women will work outside the home, so the majority of households will have two working members with conventional households no longer the norm. Younger men will have decided to spend more time at home and to take a more active part in caring for their children. More people will work as freelancers and ‘neo-nomads’, expecting increasing autonomy and freedom. As families become smaller and more dislocated, friends (and what I have termed the ‘regenerative community’) will play an increasing role in individual happiness.

05 ▷

LOW-CARBON DEVELOPMENTS



The extraction and use of energy have always framed the way we live and the way we work. Each time a new, more complex energy-consuming development takes place, it increases the pace, flow and density of human exchange and creates more connectivity between people.

Our uses of energy will also frame the way we work in the coming decades. We can expect oil prices to rise substantially as the developing world uses more energy and the sources of oil have become depleted and expensive to extract. Carbon output will rise steeply, particularly in China and India with their rapidly developing urban populations and manufacturing bases.

The world will have heated up, with sea levels rising and climates changing. Some governments will have introduced a carbon tax, and the carbon footprints of individuals and companies will be scrutinised and forced to reduce. This could result in a rapid escalation of the cost of moving goods across the globe and a rapid reduction of commuting and work-related travel. This will be a significant driver to virtual working and home-based working.

While I have described these forces separately, in reality these five trends will work together. For example, the combination of advances in technology and growing globalisation will significantly increase the use of tele-presence, webinars and other communal tools.

“The future will be less about general skills and more about in-depth mastery.”

better. In the future, you will have to differentiate yourself from the crowd, build depth and yet be prepared to shift gears across the course of your working life. I believe that the perfect storm of the five forces has created an opportunity to shift from the age of mechanisation to the age of mastery. In this new age, there is a possibility for people to put their stamp on who they are and what they choose to do. However, this possibility carries with it the necessity to become more aware of what is valuable and unique and to craft credentials in a thoughtful and energetic way. This means becoming specialised in a variety of areas and achieving mastery in them and building and carrying valuable credentials in a way rarely seen in the past.

The shift to connectivity

I believe that one of the paradoxes of the future will be that to succeed one will need to stand out from the crowd while at the same time being part of the crowd or, at least, the wise crowd. So, you will need to both stand out with your mastery and skills and simultaneously become part of a collection of other masters who together create value. Otherwise you will always be on your own, isolated and competing with thousands of others, with no possibility of the leverage that the crowd brings. In the past, success was achieved through personal drive, ambition and competition. In the future, it will be achieved through the subtle but high-value combination of mastery and connectivity.

That's because, in a future increasingly defined by innovation, the capacity to combine and connect know-how, competencies and networks will be key. It's in this synthesis or combination that real innovative possibilities lie. So, whom you choose to connect with, and to whom they are connected, will be one of the defining aspects of future working life. High-value networks will consist of a combination of strong relationships

with a few knowledgeable people (what I call 'the Posse') and a larger number of less-connected relationships with a more extensive network (what I call 'the Big Ideas Crowd'). Your high-value networks will connect you with people who are similarly specialised as well as those with very different competencies and outlooks. It is in the diversity of these broader networks, the Big Ideas Crowd, that the possibility of innovation lays.

The shift to quality of experiences

Finally, having confronted the paradox of both being individually masterful and yet joined with others, I believe that there is an even more complex shift. You, your friends and children will need to think very hard about what sort of working life you want. Simply opting for a high standard of living is not going to do it. Why? Because in the future, quality of experiences will trump quantity of consumption every time and words like 'happiness' and 'regeneration' will become the touchstone of future working lives.

The 19th-century industrialisation of the Western world heralded the move to cities and the breaking down of traditional communities. In its place came the nuclear family, often uprooted as father moved to seek work. So while the standard of living throughout the developed countries rose, often the quality of life hardly shifted. People may have been able to enter the consumer society and consume at quantity, but this did not necessarily bring them quality of experiences such as happiness or contentment.

I believe there is an opportunity over the coming decades to shape work and life in a manner that enables people to reconnect with what makes them happy and creates a high quality of experience. The breakdown of automated work, the rise of home-based working and the increase in the possibility of choice provide the foundation for a shift in focus away from quantity consumed as the only measure of success.

PHASE TWO OF THE FUTURE

The second phase of the research was launched in October 2010 with companies from all over the world. You can follow the progress on Lynda Gratton's blog: www.lyndagrattontofutureofwork.com

You can also be part of the conversation about the future of work by joining the community at www.hotspotsfutureofwork.com

The research will focus on taking action around the four most crucial themes that emerged in the first phase of the work:

- How can executives support the development of a talent pool and leadership cadre which is future proofed?;
- what are the means by which organisations can build and support the communities, networks and ecosystems crucial for the future?;
- how can we create the teams and collaborative working essential in an increasingly virtual world?;
- and what are the implications for those who have to deliver the future of work – in particular the learning, organisational development and human resource functions?

Challenges and opportunities

The future workplace will create both challenges and opportunities. Grasping these opportunities will be crucial. Some of these changes are inevitable (for example, flexible working), so the focus is on making them work as soon as possible. Other actions will be tricky and will require the creation of new practices in the way that companies are building competencies around virtual team working.

Perhaps those responses needing the greatest focus are those I call the 'contested' aspects of the future, workplace processes and procedures that have not been fully tested, such as the need for more democratic processes and a focus on experiences rather than on standard of living. Such new ways of working are going to demand a level of trial and error in the workplace that will prove challenging to workers and managers alike. Yet, in tomorrow's brave new world of work, a healthy dose of courage and optimism will go a long way.





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THE FUTURE OF WORK

THE IMPACT ON ORGANISATIONS

The future of work will change not just for individuals but also for the organisations of which they are members. To understand the breadth and extent of these changes, we first identified the 20 areas we believe to be important for the future and then asked executives in the consortium companies to rate those they believed to be most critical for the future. We also investigated where 'future proofed' examples existed — areas in which members of the consortium had already developed practices and processes that can provide insight and inspiration.

Five areas emerged as the most important:

01

TRANSPARENT AND AUTHENTIC LEADERSHIP

In a future world of transparency and connectivity, leaders will be looked upon to work in a collaborative manner. We can expect their behaviours and actions to be closely scrutinised, so their authenticity will be key. At the same time, globalisation will create the need for more complex networks and for leaders to take the initiative in engaging with global problems and challenges.

Leaders will increasingly be called upon to be members of a team, most of which will

consist of a diverse group of people, which will put an emphasis on their skills of inclusion. ThoughtWorks, a bespoke software development company, has developed a set of organisational tools: pairing decision makers, holding democratic elections for specific teams and setting up virtual networks. The philosophy behind the practice is that leadership is shared to improve decision making and create balance. Pairing happens at all levels, from the highest leadership level, to developers writing or testing software, to mentoring. Leaders are encouraged to be democratic and authentic through the process of election, in which groups are nominated and voted for by their peers.

02

HIGH-PERFORMING VIRTUAL TEAMS

Increasingly, work is performed across businesses, functions and organisations. As a consequence of this cross-border working, teams often work virtually, actually seeing each other only occasionally. Our own work on these teams shows that many fail as they become overwhelmed by the sheer complexity of their task. So it's no surprise that the executives in our consortium ranked the capacity to manage and lead high-performing virtual teams as crucial for the future.

At SAP, working virtually inside and outside the company has become the norm and has been shown to create wider networks and allow a more flexible working style. Executives are using complex dialogue and decision-making tools and social-networking tools. At BT, virtual team working has been enhanced with Telepresence, next generation high-definition

video conferencing. BT has 60 studios around the world that bring people together in multiple locations. At Save the Children, the executive team is pioneering new ways to build a collaborative approach across virtual teams brought together for emergencies and development work. The executive team believes that this is a trend that will accelerate in the future both in terms of whom they work with and how collaborative work is performed.

Other companies are focusing on how the competencies within teams can be understood and developed. At Tata Consulting Services (TCS), a competency development and training tool (iCALMS) holds a master dictionary of all roles in TCS, with a description of the accountabilities and competencies. This creates an important global base from which to identify the best candidate for a role as well as any knowledge gaps that training modules can rapidly fill. It also creates a strong foundation for ongoing learning to take place.

03 **VALUABLE CROSS-BUSINESS NETWORKS AND RELATIONSHIPS**

Increasingly, the value of the organisation will be held in its 'social capital', that is, the value of the networks and relationships held within businesses, across businesses and into the wider community and ecosystems. Building relationships across businesses will become increasingly important in the future as the driver of innovation will require businesses to combine assets and resources in ever more unusual and creative ways.

We saw a number of examples of how organisations are breaking down the barriers between

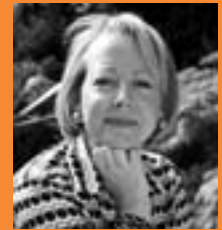
functions and businesses and creating relationships across the company. At Nokia, for example, the process of strategy development has been opened to many employees in order to develop and gain commitment to implementing the strategy. At Shell, the scenario planning process, with the recent release of the 2050 scenarios, creates a level of conversation and depth of knowledge that has become crucial to the firm's long-term planning.

At the Danish pharmaceutical company Novo Nordisk, social media plays a crucial role in internal and external communication. The key tools, NovoTube, Novopedia and NovoIdeas, are designed to improve collaboration and facilitate knowledge sharing.

Social media has also played a key role at SAP, where a series of tools has been developed for business networking, business processes and business decisions. These have enabled more complex dialogue and decision making than original social networking tools.

Building valuable networks is crucial to Nokia, where executives launched a programme called 'Booster' in 2008 to encourage cross-functional and cross-hierarchical working and to raise the capacity to acquire and use external resources. The programme covered all 5,000 employees of the business unit and started with a two-day face-to-face workshop with 700 team leaders, followed by involvement of the whole community through online social networking.

OVERVIEW



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04 **VALUABLE RELATIONSHIPS WITH PARTNERS, CONSUMERS AND ENTREPRENEURS**

Networks are not simply those that arise within the business. Increasingly, value will be created through the relationships held with those outside, be they partners, consumers or entrepreneurial businesses. At Thomson Reuters, for example, strong networks with independent people across the world have been crucial to their success. For many years, a network of highly flexible independent journalists, called 'stringers', have worked on an ad hoc basis in order to ensure that news around the world is covered at minimum cost. Some work on a retainer, others are hired for ad hoc projects. The system has existed for decades and works through strong trusted relationships and reciprocal benefits. For Thomson Reuters,

the system provides global reach, flexibility, speed and tight control over costs; the stringer gains valuable journalistic experience, increased international visibility, higher pay, the chance of full-time employment, and career development through working with a range of companies. Stringers are allowed to work for other news networks as well as local media.

ARM, the world leader in semiconductor intellectual property, is pioneering an innovative organisational model — an 'ecosystem' — intended to capture the needs of end consumers (thus providing more targeted products) while maintaining a high degree of specialisation. ARM is at the centre of a coalition of companies, all using the same underlying technology. This creates a wide range of products from which to select, so a mobile phone manufacturer can use the ARM ecosystem to compare across a range of chips produced by different companies, all using ARM research and development.

05 **FLEXIBLE WORKING**

The capacity to work flexibly was seen by our consortium members as key to the future. This flexibility is a growing competence for companies such as BT with its 'Follow the Sun Project' designed to hook up the UK and California in a continuous 24-hour operation. The project involved new work schedules and a twice-daily transatlantic handover that has brought high levels of continuity and customer satisfaction.

At Thomson Reuters, flexible working practices are widespread, with employees encouraged to work from home whenever possible. Such arrangements cover home working, part-time working, job sharing and flexi hours. These help to meet the personal needs of staff as well as the demands of a company working across many time zones. Flexible working creates challenges for performance management, and at Tata Consulting Services, a new system has been created to accommodate workforce needs.

BRAZIL: ENJOYING A REMARKABLE RENAISSANCE

VIVA BRAZIL

Brazil's current status as a major emerging market with a boundless economic horizon is a radical shift from its place in the world in the late 1960s to the mid 1990s. Georgina Peters looks at the lessons Brazil can teach other countries and talks to Fabio de Oliveira Barbosa and Antonio Quintella, a London Business School alumnus, two business leaders who are helping to steer Brazil into the future.

Feted as one of the four giant emerging markets popularly known as the BRIC nations (Brazil, Russia, India and China), it is easy to forget Brazil's dark, recent economic history. In the 1980s, it was caught up in both a massive Latin American debt crisis that stemmed from a sharp rise in the price of crude oil, and a worldwide economic downturn that brought the nation to its knees.

Brazil took on long-term debt restructuring to avoid total collapse as a result of its balance of payments due to banks on the international capital markets. This restructuring bogged Brazil down in decades of repayments and restrictions from international lenders. During that troubled period, Brazil could best be described as a nation marked by political, economic and social turmoil — with military coups and a destabilising and growing divide between the wealthy few and the majority living in abject poverty.

Over the past two decades, however, Brazil has emerged as one of the world's stronger developing economies, the largest recipient of foreign direct investment in Latin America, a nation no longer dependent on foreign oil and a country with a stable working democracy that is home to a growing middle class. Antonio Quintella, CEO of Credit Suisse in Brazil, says that Brazil's growth is a result of its 'transition from a pretty irresponsible

