

PLAYBOOK

ENGINEERING THE FUTURE OF WORK





PLACES



PLATFORMS



PRACTICES



POLICIES



PEOPLE



Editor's Message



In the changing world of work, every aspect of work as we knew it requires a redefinition. Let us start with the easiest of all – organisation, which is defined as “a group of people working towards a common purpose”. Three things form the core of definition of organisation – people, structure/ physical entity and purpose. Now let us look at Work, which is defined as the act of “performing to fulfil duties regularly for wages or salary”. The central premise in the definition of work, largely, is ‘wage’.

In Work 4.0 the core tenets of these definitions fall flat. Boundaryless organisations are not physical entities. People are increasingly not bound to one organisation or purpose and could be working for many at a time in the gig economy space. Work may not essentially be about wages but about meaning, purpose and opportunities for development.

We started contemplating about the Future of Work as a strategic area of focus for India in 2018 and spoke with multiple global experts as we started plugging elements into this platform. It didn't take too long to conclude three things:

1. There existed no holistic/coherent, neutral dialogue around the Future of Work for our region and we were best placed to do that, given our neutrality and wealth of connections
2. No one really knew what the Future of Work really was or where it was really headed – especially, what was the India story
3. Dominant dialogues were around automation, loss of jobs- driven by aggregate numbers and skillsets- the overall picture was grim.

It is here that the idea for the Playbook for Engineering the Future of Work evolved. We wanted to leave individuals and organisations with a set of ideas, frameworks and perspectives to ‘try out’ in the evolving world of work. We were also keen that these be both Indianisable as well as implementable, than mere commentaries. With this in mind, perspectives presented in this playbook have been curated from experts in India, Singapore, the UK and the US with specific focus on what can be done in India.

The first edition of this playbook aims to give a ‘lay of the land’ to our readers. With invited pieces from the ecosystem players in the Future of Work domain, we bring to you, perspectives in a 5Ps framework - People, Platforms, Places, Practices and Policies.

In the People piece, we bring expert perspectives about learning and skilling that will enhance human-machine collaboration as well as how organisations can enable this transformation. The Platform segment begins with an opinion piece on how Future of Work can be envisioned from a platform standpoint and also features a technology perspective on the impact of AI and automation. The Places dialogue is focused on how workplaces as we know are transforming and the predictions for this sector for India. We bring the much talked about ‘Framework for Good Work-UK’ and inclusivity angles for the consideration of Indian players in the Practice segment of the playbook. Lastly, the Policy segment discusses needs for evolving frameworks, policies and safety-nets that can democratise Future of Work for India.

Clearly, this is a first attempt at unifying the work dialogue in India and you will soon see more editions and updates. We do hope you find these dialogues and frameworks useful and would take them back to your ‘workplaces’.

We are committed to catalysing the Future of Work in India and invite all of you to join the movement.

Let's solve the jigsaw of work!

Anitha Kaveri
Head of Sectors, IET India

From the Country Head



We all have a version of how we perceive work should be. A lot of us feel that is changing and rapidly so. There are also questions on the difference between work and job. For most of the 20th century and up to now, these two terms have been used interchangeably. As automation and AI powered intelligent machines are making thousands of existing jobs redundant (while also creating thousands new jobs), the clarity that work and jobs need to be treated separately is coming into sharp relief.

Jobs are changing and a number of current jobs will become redundant. This is now an established fact. The Future of Jobs Report 2018 by the World Economic Forum report has some startling datasets which clearly establish this premise. Those of you who have not yet looked at the report could do well by downloading a copy of the report to read.

The natural fallout how jobs are changing is the impact on the nature of work. The current work system is aligned to cater to large scale employers, however it is important to note that this phenomenon is only about 250 years old. Prior to that most people had a skill which was available for hire creating a micro-entrepreneurial economy. In the last few years we are seeing the resurgence of the micro-entrepreneurs and changing the nature of work. However our systems are still geared towards large scale employers while on ground there seems to be a systemic shift happening.

The question that we need to ask ourselves is how prepared are we? As industry and business, as higher education centers of learning, in our governance and regulatory systems or as individuals? The IET in its remit of working to engineer a better world has built a neutral platform with key stakeholders to help create a roadmap to navigate this change.

The Playbook that you are going to read is a collection of views from a number of perspectives around the Future of Work. This is the first edition and we hope to incorporate more inputs in our future editions.

Happy reading and let us know what you think!

Shekhar Sanyal

Country Head and Director, IET India

From the Chair of the Steering Committee



One of the biggest challenges looming before HR leaders today is - how to get their current workforce ready to work alongside robots and advanced technologies? Factors including high attrition rates, widening skill-gap and increasing training costs are complicating the picture. To stay relevant in the future of work leaders need to create a work environment that has a unique blend of advanced technology coupled with digital and human skills - and this transition will need the support of the work ecosystem.

The IET's Engineering the Future of Work platform was designed with this in mind. Skill sets that are sought after today might be less necessary two years from now. Similarly skills and organisation structures which are building blocks for success might be the ball and chain that will pull down productivity in a very short interval. It's a perplexing time for the Indian workforce as well as the industry.

We believe that there is an urgent need for all stakeholders to come together and discuss the evolving Future of Work landscape in India. With a holistic mind-set we plan to look at all aspects of the Future of Work jigsaw, including the input system of higher education (and the change required there), the management and structures of organisations (what will work and what will hinder), the learning path of the individual (and how that will change), and the new frameworks that have to be devised for the success.

The edition 1 of this playbook brings a wealth of views from the global ecosystem players of work. We will be working closely with the Indian ecosystem to evolve this to the next stage - add a fresh set of data points and case studies and look forward to your continued support and engagement.

Mandeep Maitra

Leadership and Transformation Coach and Chair of the IET's Engineering the Future of Work Steering Committee

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PEOPLE

PEOPLE AND SKILLS IN THE FUTURE
OF WORK



Gaurav Kumar

President - Corporate Development,
upGrad

Learning for the Future of Work

While the debate on exact colour and shape of FOW goes on, technology and its impact on workplaces in later half of this decade is probably more than last few decades put together. At one-end there is a growing concern over machines taking jobs and on the other compelling reasons to believe its profound ability to positively impact productivity, efficiency and application across services at scale. On the former, we need to understand that there are very few jobs (in single digit percentage probably) whose all activities can be automated where-as there will be large number of jobs (anywhere between 40-60%) where more than half of their activities could be automated. So it would essentially be about more complex, nuanced job roles with right skills adapting to the changes. On top of it, growing sensitisation about softer aspects like empathy, diversity, equity and accessibility at workplaces will mean sustained and institutional effort to inculcate these attributes while skilling for FOW.

At the same time, what becomes critically important to understand that required skills for FOW would mean different things for different geographies. Different labour market dynamics of countries like South Korea or US than Bangladesh or India or Philippines would mean different kind of approaches due to their varied labour markets' characteristics. What makes it more trickier is workforce distribution across organised and unorganised sector- earlier set of countries in complete contrast to latter ones. A common thread is probably the need to up-skill existing workforces

and definitely the mid-career roles. Their transition to changed skill requirements as well adaption to changing technologies would be a critical success factor in order to keep a majority of workforce relevant and ready for FOW.

This will need a closer than ever working relationship between job-floors i.e. employers and academic institutions / skill providers. We see a greater role of technology enabled up-skilling programs integrating emerging technologies like AI, Extended Reality (AR, VR & MR) and more to provide simulated and personalised training environments. To be able to ensure that relevance of larger existing workforce remains- this will be needed across sectors and occupations. A conscious and sincere effort at part of policy makers, government bodies, employers and skill providers to support workforce reorientation and continued relevance to avoid a major social-economic turbulence will be required. Historically, it's been a concerning factor and we hope this witnesses a changed approach going forward.

Equity and equality - both need a different take than current approach to ensure impact of FOW is positively channelled for larger and diverse workforce. Recent events across the world, particularly in Europe and MENA have led to huge migration of a large working population without the necessary livelihood opportunities and it's incumbent that these segments are taken in account while designing policies for skilling and upskilling for FOW.

Gaurav has worked extensively in the area of higher & vocational education, workforce development and future skills. In his previous roles at KPMG and PwC India- he advised key stakeholders such as- central ministries, state governments, bi&multi-lateral agencies, education institutions and employers across sectors on changing workforce requirements, impact of technology on labor elasticity and key priority areas in future. In his last avatar as Vice President & Head of Strategy - Special Initiatives at Reliance Jio, Gaurav was responsible for new business ventures, product management and investments.

In his current role at upGrad as President - Corporate Development, Gaurav heads M&A, Partnerships and Strategic Alliances with key stakeholders in HigherEd, HRTech, Financial Institutions and Employers.

OPINION



Raymond Koh

Research Director- Lead for Future of Work,
AR VR and Mobility, IDC Singapore

To thrive in the digitalised era, a holistic transformation across all facets of work is needed

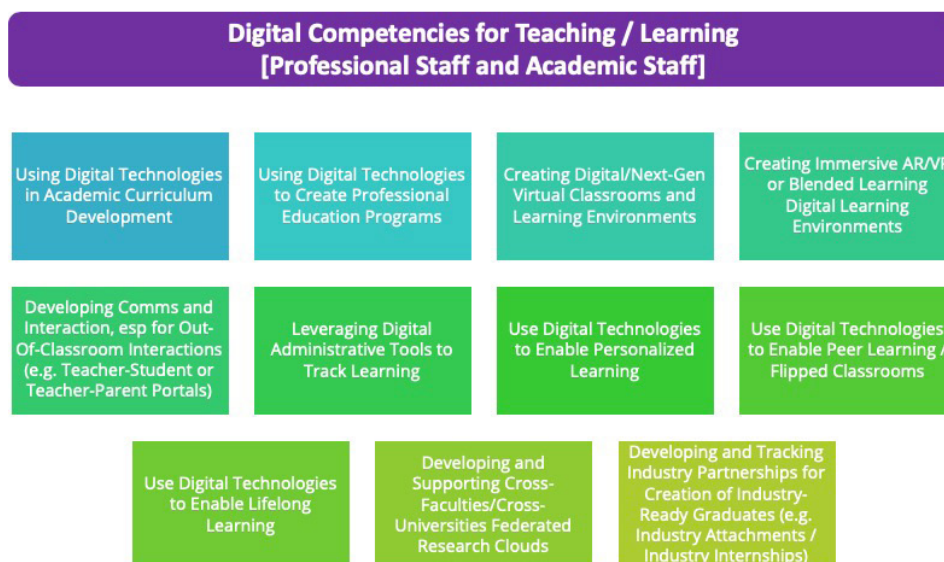
The Future of Work refers to the application of new talent management practices along with 3rd Platform technologies and Innovation Accelerators such as AI, AR/VR, and the Internet of Things (IoT) to fundamentally change the concept of work and how it is done. It is a holistic strategy that aims to leverage digital technologies, attitudes, and behaviours to reinvent the way businesses engage with their employees, partners, and customers to drive higher efficiencies and deliver superior experiences (than just products or services) that result in sustained competitive advantage.

The evolving nature of work, skills and values; requires both the existing workforce and newly minted graduates to acknowledge that the present definition of work based on the context from the last century has evolved. The measurements of success, based on core professional and proficiency in technical skills alone will not be

sustainable for the workforce of the future. Soft skills will be the differentiator in the future of work; the workplace of the future will require professionals who have attained multiple skills (core, technical and social), such as negotiation, critical thinking, problem solving and ethics.

Disruption and job displacement is the new norm. Movement towards hybrid and shorten job tenures is more common place today and current job roles will either be made obsolete or redundant in the future through automation, robotics, and innovation. Consistent and continued skills upgrading and greater exposure to the various business functional aspects within the organisation is expected. Those with a holistic exposure to reskilling, retooling and adapting will provide outstanding business value and succeed further in their careers.

IDC's Digital Skills Competency Framework



The Future Enterprise (FE) is characterized by organisations that successfully thrive with a digitally-native culture, effectively compete through their ecosystems, generate revenue from empathy at scale and demonstrate an ability to adapt operating models to complex customer requirements; all of which are enabled by an intelligent, empowered and agile workforce.

Don't just look at the Future of Work as an automation or technology upgrade drive. Look instead at the bigger picture of new possibilities this can create for your organisation. Talent attraction and retention, and improved user experience for both employees and customers are critical outcomes of the Future of Work journey that can help you win in the marketplace.

Workspace

It does not matter anymore where the work is done and how. It is more critical to empower employees with the right set of tools and technologies, and an enabling environment that fosters a digital-first approach. But while doing all this, ensure security and compliance.

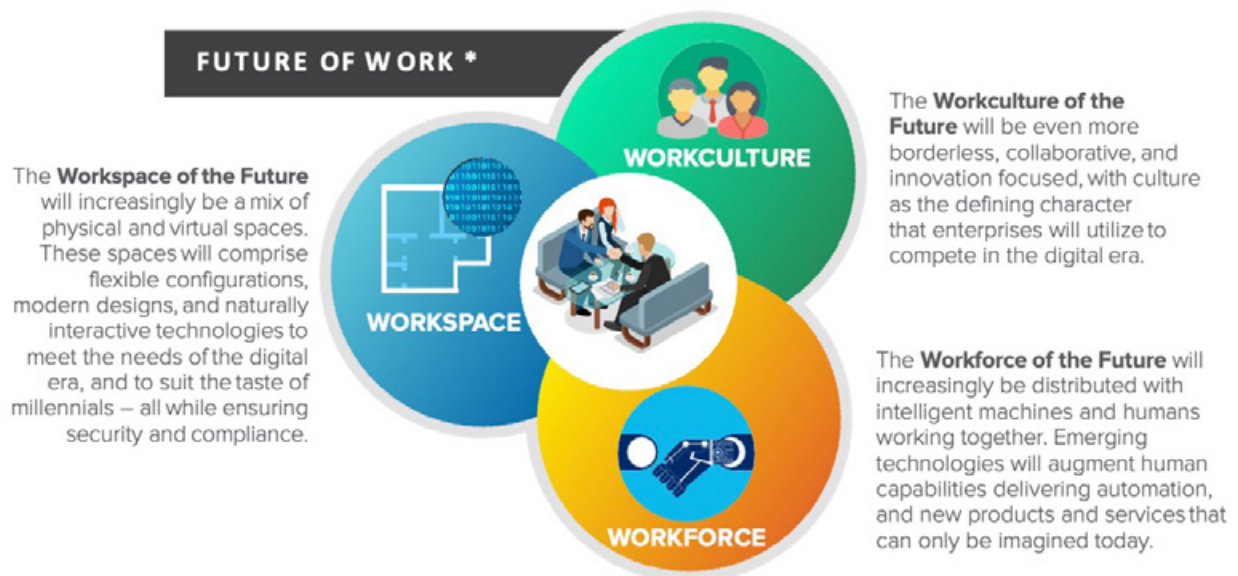
Workforce

Explore areas for augmenting your workforce capabilities with emerging technologies. AI, and AR/VR, are not just for productivity, but even for product and service innovations. It does not matter if the workforce is internal or external, it should be empowered.

Workculture

Create policies and structures that facilitate collaboration with the broader ecosystem. Focus on talent practices that attract and nurture the best talent, rewards innovation, and conveys the same as a unified brand identity for your enterprise.

Raymond is Research Director with IDC, leading the Asia/Pacific Future of Work, AR/VR and Mobility practices, based in Singapore. In this role, he provides strategic insights and advisory services to business leaders, C-Level executives for their business transformation, technology investments and go-to-market strategies. Raymond brings deep understanding of the technology sector and analyses the impact of emerging technologies such as AR/VR, AI, IOT as well as demographic changes, and evolving people behaviours on Future of Work and society at large. As a DX business development evangelist and an entrepreneurial and innovation consultant, Raymond provided consultancy services to organisations helping them reinvent their businesses for the digital age. Prior to joining IDC, he was the head of Deloitte SEA's Risk Innovation Center. In this role, he had helped to incubate new innovation and greenfield projects.



*IDC Future of Workframework



Manmeet Singh

LEAP Digital Skills Practice Area Lead-
Future of Work, Citibank

Learning for new paradigms

What is changing in Banking?

From California to China, the banking industry is increasingly being challenged by digital disruption. With advances in technology, the relationship that customers have with their bank and with their finances has changed. Customers rely less and less on walking into a branch for their banking needs, and instead have digital options to help them — ATMs, on-line chat, mobile phones, and Internet banking.

Investments in financial technology have growth exponentially in the past decade aided by growth of fintechs. Although Fintechs companies have the advantage of new innovation, incumbent financial institutions still have the upper hand in terms of scale and we have not yet reached the tipping point of digital disruption in either the US or Europe. However, this is not likely to continue for long.

As customers shift their behavior and move more towards digital solutions, banks will need to rethink their digital strategy. Many leading global banks are also preparing for this impending digital disruption. The trio of automation, new business models and regulators is creating the tipping point of digital disruption in the banking industry.

What is changing at Work?

As per an internal research conducted in 2013 by a leading US bank, 47% of jobs in US alone are at the risk of automation. Increasingly, technology is enabling the automation of tasks once thought quintessentially human: cognitive tasks involving subtle and non-routine judgment. The boundaries surrounding the tasks achievable only with human labour continue to contract at an alarmingly accelerating rate. Big data has been a driver for automating complex tasks that close the gap with human knowledge. Digitisation and automation are other big drivers. Certain banks have identified that branch transactions have seen a 30% drop since 2010, while other banks have indicated that over half of all consumer lending is now transacted without the customer ever visiting a branch. Automation in trading is continuing, leading to headcount reductions and improved operating margins.

It is not all gloom and doom for employees. While some jobs are going away due to automation, other jobs are being added. This means employees will have to adapt to this rapidly changing environment and acquire new skills, knowledge and mindset.

Another internal research by the bank also identified 12 key trends, which will affect the employee of the future (shown overleaf)

Employee of the Future Trends Summary

1 Seeking purpose The search for purpose is increasingly guiding employee decisions	2 Health and wellbeing Physical, mental and financial wellbeing is a critical part of work/life	3 Episodic careers Non-linear careers are becoming more common and desirable	4 Gig / New working models Employees are shifting towards fluid working models and styles	5 Fluid environments Flexible working environments are critical as employees de-locate	6 Lifelong learning Employees increasingly see non-stop learning as a critical part of work
7 Succeed sooner Employees are learning to "fail fast" in order to succeed sooner	8 Automated workplace Employees are adjusting to a more digitized workplace	9 Quantified worker Employees explore how to measure and analyze their work performance	10 Diversity first Employees are increasingly conscious of diversity / inclusion	11 Taking ownership Employees want more control and choice over their work	12 Collaborating together Employees are collaborating more to solve complex problems

Each of these trends point towards the need for getting employees upskilled to manage the rapid change due to these trends in the future workplace.

How is banking industry preparing Employees?

Some banks have recognised the need to have a strategy around Future of Work. Some are building internal expertise within their learning functions with the objective of building digital acumen and skills of the future in our employees.

One of the banks started by first creating a digital maturity map which helps teams or businesses within the organisation to identify where they are in the journey to digital transformation. This was done to help create a clear consistent taxonomy and nomenclature towards digital and future skills.

Efforts are also underway to create a curated set of curriculum around the emerging technology and workplace trends influencing the financial industry e.g. Blockchain, AI, Big Data etc. These curated learning experiences are being designed with help of internal or external expertise. Today many online learning platforms, help personalizes learning for employees with custom AI powered recommendations based on their interests. Several popular MOOCs (Massive Open Online Courses) and online learning platforms help employees to increase their knowledge about digital and technology.

Banks are also exploring assessments as a fun and engaging way for employees to assess their digital acumen and build their curiosity around this topic. Many corporations have set up digital academies with the objective of teaching talent about "Skills for Tomorrow". Employees follow up learning theoretical concepts by working on live projects where they get to use their knowledge and improve tech and digital skills. This is now helping many of them to pivot their careers by learning tech skills while on the job. Other corporations are working towards creating virtual "community of practice" where employees curious about emerging technology regularly meet and talk about various digital and technical topics of interest. This promotes peer based learning on these topics by encouraging employees to share knowledge and learn from others within the organisation.

We believe that these initiatives will ultimately help organisations build a culture where employees recognise and work towards building the skills, knowledge and mindsets that are necessary for their success in the future workplace.

Manmeet currently works in the Citi as Practice Area Lead – Digital Skills. The job involves getting employees, HR and learning professionals within Citi to be ready for the future workplace. It involves identifying future skills and helping build digital acumen within the organisation. He has worked across HR and learning domain and likes working on projects at the intersection of people and technology. He has worked extensively in leadership development, coaching, digital learning simulations and collaborative learning projects. He likes reading, running and learning new languages. He is passionate about learning and loves to have conversations over cup of coffee or tea, in-person or virtually.



Robin Bhowmik

Chief Business Officer, Manipal Global Education Services



Reimagining the Future of Work

Global advancements in technology and infrastructure are together transforming work in fundamental ways, creating a future unlike anything seen before. As a result, workplaces are undergoing massive changes in scale, scope and complexity. This article explores some of the major influencers impacting the future of work.

Industry 4.0 technologies - The growing adoption of Artificial Intelligence (AI), Machine Learning (ML), big data and related technologies is redefining the very nature of work. With technology augmenting human effort, the focus is shifting from execution of routine tasks to solving problems and increasing the efficacy of output. Financial institutions, for instance, are leveraging technology to automate routine processes, increase productivity, improve risk management, prevent fraud, support credit decisions and also improve employee training and assessment. The advent of blockchain and cryptocurrency is impacting the very nature of financial transactions and the way ordinary people manage money.

The rise of the "gig" - 75% of Gen-Z workers are interested in short-term, contract roles that allow them to focus on individual priorities. Even as traditional firms struggle to retain skilled talent and rework established organisational structures, sixty-six percent of large companies are leveraging the gig economy to curb their manpower and overhead costs. However, workers will need to constantly supplement their knowledge and skills by acquiring new qualifications and advanced certifications to successfully juggle multiple jobs in parallel.

Motivating the Gen-Z worker - One of the fallouts of the gig economy is the difficulty firms will face in attracting, motivating and training good talent who can contribute to growth. The modern worker will constantly seek personal development oppor-

tunities and workplaces that will further their ambition. According to a survey by Deloitte, employer led training and education assistance will be a big perk for millennial gig workers looking to further their career.

Global and remote workforce - Remote working is becoming commonplace with location no longer being a constraint as the next generation of workers can plug-in from anywhere, at any time. Even the more conservative sectors like BFSI and healthcare that were holding out on this change are coming around to support and facilitate remote working options without impacting productivity.

Continuous learning - The above factors all result in continuous learning becoming integral to work life. Training and development programs will be key to help employees successfully adapt to a new work order. Freshers and seasoned professionals alike will need to constantly re-skill and up-skill to keep pace with evolving workplace practices, solutions and technological advancements. Experienced bankers for instance are having to upskill to understand the impact of industry 4.0, blockchain, cryptocurrency, evolving regulations and their impact on trading and financial transactions in an increasingly global market.

Robin Bhowmik, Chief Business Officer, Manipal Global said "With Digitisation of the workplace; the BFSI Industry is going through a rapid shift in roles and skills required to deliver superior customer experience combined with incremental operational effectiveness. It is a question of time before every business moves away from Tech enabled to Tech integrated. The future of work in such a scenario will move towards structures that enable agile, byte sized, connected and scalable work-tasks supported by organisational systems and metrics to support outcomes. While the gig-economy strengthens, multi skilled and versatile talents will prevail combined with increasing



focus on soft skill development. Most workers irrespective of their age and years of experience, will need to play an integral role in increasingly flat organisation structures which are driving out hierarchy. Automation, Robotics, AI led technologies will transform over 40% of current operational roles within the BFSI sector and reorient these resources towards customer acquisition and driving innovation throughout the delivery cycle.

Within a country such as India; a significant refocus of people and skills within BFSI towards financial inclusion, rural banking and microfinance with MSME resurgence will drive productization of services combined with products with variable commercial models. The future of work continues to be enigmatic at multiple levels within this scenario with the overarching theme of agility, technology integrated, human wellness, inclusion and distributed being core to this transformation.”

Fostering growth and agility with customized training solutions Established industry specific training partners who can offer customized solutions to enable organisations to scale, increase productivity, retain talent, and lower the cost of hiring and training will gain importance. Enterprises will seek to rework their L&D programs to help employees successfully adapt to agile, flexible and inclusive workplaces. Managers would need to be periodically trained to think disruptively, embrace change and stay agile to succeed.

Learning will be central to survival and progress at workplaces of the future. Training will be increasingly demand led, micro, customized to individual needs, relevant to changing times, mobile-first and on-demand – all adapted to the needs of the new generation.

Robin Bhowmik is the Chief Business Officer for Manipal's Global Academy of Banking, Insurance and Financial services. An innovative, entrepreneurial, growth and results-driven executive with over 24 years of global experience; Robin is a recognized expert in using both consumer and enterprise technology to drive disruption within Industries that include Education, Banking and Healthcare.

He has led global teams within the technology industry across Europe, Asia Pacific and Japan and has performed leadership roles within industries that include Healthcare, Telecommunications and Financial Services. In these roles, Robin has successfully delivered organic and inorganic growth while leading geographically diverse teams focused on Management Consulting, Digital transformation and Global Delivery besides spearheading change management programs.

An alumnus of University of California, Berkeley, Haas School of Business; Robin additionally holds a bachelor's degree in International Relations from Jadavpur University, an Advanced Diploma from NIIT in Systems management and a Post Graduate Diploma in Management from Calcutta University.

Organisations can catalyze a data-smart culture by:

- Defining strategy and aligning stake holders towards shared business goals
- Integrating the right talent by customizing training solutions to appeal to different profiles
- Democratizing data by enabling easy access to it
- Demonstrating success to increase adoption



PLATFORMS

PLATFORMS POWERING THE
FUTURE OF WORK

OPINION



Sangeet Paul Choudary

CEO, Platformation Labs

Future of Work - a platform perspective

Technology and labour have a fundamentally interdependent relationship. Since the rise of the industrial revolution, technological shifts have repeatedly impacted the nature of work and how it gets organized. To understand the future of work, we must understand the technological shifts underway and its impact on three fundamental questions: who does the work, how does the work get done, and how does the work get organized?

Let's start with the first question. Who does the work? For much of the last two centuries, this question has had a straightforward answer. The traditional organisation was built to aggregate work within the boundaries of the firm to create output.

As the world gets more connected, work is moving beyond the boundaries of the firm and can increasingly be performed within a firm's ecosystem. In-house editors create most of the content at NewYork Times, whereas a whole ecosystem of journalists and users create content for Twitter. Twitter's users are performing the work that employees would have performed traditionally. Twitter's content creation isn't bound by the same scale constraints that govern a traditional firm like the NYT.

Platforms like Twitter, Uber, and UpWork re-imagine who does the work. More generally, any firm can leverage the advantage of cloud-hosted workflow management technologies and a globally connected workforce to get work done outside its boundaries. Consequently, freelancing is on the rise. From the individual worker's perspective, personal branding is more important than ever before as work opportunities are no longer restricted within firm boundaries.

Next, let's look at the second question. How does the work get done? This is, possibly, the single most contested topic as the rise of artificial intelligence and workflow automation reconfigures how work gets performed. To understand the impact of these technologies, it is important to understand three

fundamental relationships that human workers will have with technology: Assistance, Augmentation, and Automation.

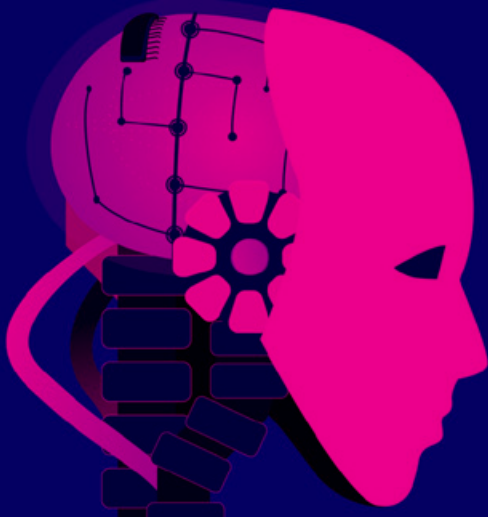
Assistance is, possibly, AI's least understood relationship with the human worker. Google's Assistant, Amazon's Alexa, China's LingLongDingDong show us how AI could possibly assist human workers. In the workplace, lower-end project management tasks are increasingly being performed by AI assistants. AI assistants also help the freelance economy workers to scale without needing to hire large teams around themselves.

While assistance complements human capabilities, AI-enabled augmentation enhances human capabilities by enhancing tasks with contextual decision support. In China, PingAn Good Doctor augments doctors during patient consultations and learns from the entire ecosystem of doctors to improve its augmentation capability. DAQRI's Smart Helmet augments workers with real-time device recognition and metering, allowing them to process information while on the job, without requiring task switching.

Finally, many forms of work will also get automated. Contrary to earlier held beliefs, even creative work is increasingly getting automated with AI-driven news generation and paintings producing results which are as good, often better, than those produced by human counterparts.

The third question - How does work get organised - is an important mental model to understand the future of work and organisational behavior. One of the most important shifts that we are witnessing is the rise of the algorithm as the middle manager. Ride-hailing platforms provide an illustration of a business where algorithms manage drivers and developers manage algorithms. In the future of work, we are going to increasingly see a distinction between above-the-algorithm and below-the-algorithm workers.

Algorithms will manage not just resource allocation as in the ride-hailing example, but also storing



organisation knowledge and learning in a way that allows a truly on-demand workforce to operate under them because of a standardized model of enterprise knowledge management. Knowledge management platforms like Microsoft Teams and Slack will play a crucial role in the future of work and how it is organized.

Finally, to understand the future of work systemically, we also need to account for larger macro changes, including longer life expectancy, access to continued learning, and greater cross-border flows in services. The changing nature of work will also require new policy design to ensure labour welfare and healthy consumption driven by competitive wages.

Sangeet Paul Choudary is an international best-selling author of the books Platform Revolution and Platform Scale and a C-level advisor to Fortune 500 firms in Europe, North America and Asia. He has been selected as a Young Global Leader by the World Economic Forum and is ranked among the top 30 emerging thinkers globally by Thinkers50. His work on platforms has been selected by the Harvard Business Review as one of the top 10 management ideas globally or 2017 and has been included twice in the HBR Top 10 Must Reads compilations.

Sangeet is a frequent speaker at global events including the G20 Summit 2014, the United Nations, the World50 Summit, the Mobile World Congress, and the World Economic Forum events. Sangeet is an Entrepreneur-in-residence at INSEAD Business School and was formerly the co-chair of the MIT Platform Strategy Summit at the MIT Media Labs. He is also appointed to the WEF's Global Future Council on Platforms and Systems.





Lux Rao

Director & Leader – Solutions, NTT India



vmware®

Technology Platforms – the Crux of Workplace Transformation

We live in exciting times where technology from being an enabler for business has evolved to in many cases becoming the business itself.

There are plethora of references and tangible business models that have redefined the way business has evolved. The rise of the gig economy has been singularly driven by the disruptive rise of platforms that de-linked the need for assets, mega investments & domain knowledge. The upstarts are transforming legacy businesses with just an understanding of ubiquitous connect & the changing behaviors of an increasingly diverse demographics covering a wide swathe between baby boomers on one end to Gen Next at the other.

Platform is becoming core to the engagement of customers & workers alike and is transforming the way we live, work, shop or play.

Here are a set of diverse observations that span work & play which illustrate the disruptive impact AI & Automation are driving in the market today.

Engaging Customers better

Customer Experience (CX) is recognized as the number one driver of digital transformation, and the top strategic measurement for organisational performance.

AI is playing a pivotal role at every stage of customer journeys – not just in Analytics & Insights but going beyond by way of driving better human engagements & immersive customer-seller conversations by blending disparate silos to create a consistent experience across consideration, acquisition, support, and loyalty. AI will have a significant bearing on the future of customer engagement

Engaging Workforce better

Consulting firm PwC predicts that robotics, AI and smart automation have the potential to contribute more than \$15 trillion towards the global GDP by 2030, generating demand for more jobs.

PwC also studied the impact of robotics and AI on a global scale and found that vulnerabilities do exist for job loss due to automation and robotics. The study predicted that through the early 2020s, only about 3% of jobs have the potential to be displaced.

According to the report, 54 per cent of businesses confirm that implementation of AI-driven solutions in their companies has already improved productivity.

Engaging Fans better

As the competition for fan engagement increases across major global sporting events, artificial intelligence (AI) & machine learning offer new ways to deliver more sophisticated and connected data experiences. AI-powered experiences, or connected stadiums are evolving to meet the growing demands of digitally savvy fans & viewers and that has a bearing on the future of sports.

Companies that have a robust AI strategy are more likely to experience dramatic improvements in their customer experiences. Their employees will be more motivated as they can focus their energies on high-value customer-oriented tasks and collaboration.

AI systems will enable businesses in improving the quality of their products or services, engage their customers better, prune costs and as a result, enjoy higher profits. Not surprisingly, therefore AI & Automation are being driven more by Business Leaders CXOs.



What does all this mean to the Future of Work

We are looking forward to an exciting world of Man-Machine Collabouration and hopefully a conflict free engagement. There is no iota of doubt in anyone's mind as to who wins when it comes to repetitive tasks and computing operations

However, when it comes to emotions, cognitive tasks & creativity, human intelligence will be par for the course for many more years to come. Technologists would still be needed to develop, deploy and maintain the Automatons & enhance innovation and efficiencies.

We can foresee a future not too far ahead when organisations would put in place strategies man & machine to co-work.

Opportunities

Contrary to the hyped belief that Automation will take away jobs, AI & Automation will create a plethora of opportunities & new jobs. According to a World Economic Forum report, robots and AI will create as many or more AI jobs as they displace.

While onerous, repetitive & hazardous jobs will be cannibalized by Automation, keeping true to historical trends as witnessed by the industrial revolutions, it paves the evolution of hitherto unknown jobs that that will leverage the full spectrum of human talent & creativity.

The confluence of IoT & AI is accelerating the learn-ability of machines as they start to learn & mimic human behavior. This in turn is changing the known beliefs of programming & programmability.

Data Scientists and AI Modeling Engineers is just the beginning of a role revolution. One would not be surprised at the emergence of new roles such as (possibly) Algo-Analysts, Machine Trainers, BOT Supervisors, Machine Linguistic programmers.

Organisations need not be worried about where to find the skills as the gig economy would enable every skill to be available just round the corner so long as organisations can alter their mind-set & are open to hiring talent on demand & basis outcomes expected.

Summary

AI is here to stay and will be a key catalyst in transformation for businesses

AI and automation, even when they are implemented partially, have unlimited potential for any business

Future workplace scenarios would have a blend of man-machine engagements

The workforce of the future will lean more towards innovation and creativity.

It may not be too far away when the concept of FTE may diminish and that possibly may be a good thing for individuals & organisations alike.

As the leader for the Digital business, Lux is responsible for devising the strategy and lead the charge for NTTs foray in digitally enabling organisations across sectors & industries thereby adding impetus to the Digital Solutions Business at Dimension Data.

Prior to joining NTT, Lux was heading the Digital Transformation Office at Cisco. He was responsible for driving the Digital Transformation (DT) agenda and help customers define their digital journey & chart out the Transformation Roadmap across various verticals such as Healthcare, Manufacturing, BFSI, Retail, Smart Cities etc.

Lux is a regular speaker at technology conferences in India & Abroad and has chaired/moderated several conferences. He has been awarded the prestigious IDC Award for Excellence in Innovation for the year and best CTO – Digital Transformation He has also won the coveted "Technology Evangelist for the Year" - an Industry recognition for three years in a row.

Lux is an Electronics & Communication Engineer from Bangalore University, PG in System Analysis & Design and an MBA specializing in Marketing & Finance from Manipal University.



PLACES

PLACES ENHANCING
THE FUTURE OF WORK

OPINION



Chandramouli Srinivasan

MD&CEO - Feedback Insights

Spaces shaping the Future of Work

Workplaces are changing and at a pace which is quite rapid due to economic, technology and cultural factors. The Services and Knowledge industries which contribute significantly to the economy are shaped by the following challenges

- Millennial workforce, their aspirations and work expectations
- Distances between place of work and stay
- Traffic and the time spent on the roads
- Need for collaborative working across the globe
- Technology changes in working models in firms

Across the globe, there is a trend of moving towards hot desking i.e. non assigned seating since employees are traveling or working from home. This is catching up quite quickly in India and firms are adopting this to optimize real estate expenditure.

The choices are increasing with the advent of co-working spaces. Co-working spaces embody the cool workspace with the state-of-the-art facilities and infrastructure. These co-working spaces are very popular among the start-ups which offer great work environment and energy. I have heard from a few start-ups on the possibilities to learn from other firms in the same floor and this opens a huge collaborative culture not just within the firm but across firms to build a thriving ecosystem.

Larger firms are also building facilities across the city to reduce commute time and encourage employees to work from centres closer to their place of stay. This kind of trend is hugely appreciated by employees.

A recent survey revealed that employees are placing importance on 'commute time' as much as they do on job content / work environment.

It will be difficult for larger firms to work out of co-working spaces given the size and scale that larger firms seek, and the cost involved. Larger firms are increasingly using a hub and spoke model to connect work force within a city as a workaround.

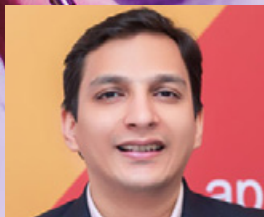
The following are some of the key challenges in this context

- Employee connect and engagement
- Productivity
- Distributed teams
- Policy roll out and governance

The key to success for these models of working is ensuring a common communication infrastructure, aligning policies to the new way of working, empowerment for employees and measuring productivity through outcomes and not just hours. Firms are working on building newer processes and systems to align in the "future of work". HR department is changing its approach to enhance the employee experiences in these models. These include creating virtual bulletin boards, learning portals, collaborative software, encouraging physical meeting of the teams once a week or fortnight etc. While the new workplace offers a lot of advantages of remote working, collaborative working etc., it is important for firms to adapt their policies, systems, processes and technology to keep pace with these changes. The key is to keep the employee in the centre while designing the models.

It is debatable whether these co-working spaces and hubs have made workplaces more productive. I guess that this is work-in-progress but aligning to the future of workplace is critical to attract, retain talent and nurture a collaborative work-force despite physical and time-zone boundaries.

Chandramouli has over 20 years of experience in research-based consulting engagements in the B2B and B2C market spaces, positively impacting close to 300 clients. He has been instrumental in building Feedback Insights into a leading firm focused on carrying out Customer Experience Studies, Customer Journey maps, Employee Experience, Dealer Satisfaction studies and Brand assessments for leading B2B firms across sectors. His key strength is his ability to design a contextual research approach which is specific to the client's business objective. Chandramouli is a regular speaker in various industry forums and associations such as SPIN, NASSCOM, IMTMA, etc and conducts guest lectures on B2B market research at various management institutes such as IIM Bangalore, XIME, IFIM, Symbiosis University, SDM Mysore etc.



Sumit Lakhani

CMO, Awfis Space Solutions

Workplaces of the Future – what lies ahead?

The modifications in workplaces or work environments occur when real estate, innovation, and human practices are applied to create fun, adaptable, synergistic solutions that inspire advancement and empower an assortment of work styles.

Given the dynamic ecosystem of work, the following 5 key trends will play an important role in shaping the future workplaces:

1. Leveraging of shared economy spaces by Corporates

The latest swing towards remote working means that the office resources remain idle while employees work outside the office at locations easily accessible to them such as café's, hotel lobbies, etc. In coming years, organisations will create workspace solutions like flexible seating/hot desk-ing within their office space or collaborate with coworking companies to reduce the real estate footprint by 50%, allowing mobile professionals to work out of a coworking partner's premises as & when required and contribute to increasing employee satisfaction significantly. This trend has already started coming to the forefront with many enterprises entering into partnerships with coworking companies.

2. Prioritising Health and Wellbeing related practices

Cities, Buildings and Workspaces will be designed keeping the individual's wellbeing as the top priority. The workspace will have numerous choices such as enabling agility/mobility during the work-day, by providing treadmill workstations, pedal tables, posture and massage ergonomic chairs. The building and workspace will have to be planned with robust technology & furniture as health devices and big data & analytics will allow for mass customizations as well as provide bespoke well-being solutions for individual employees.

3. Transportation will transform according to the travel needs of individual employees

The transportation options will reform travel in the next decade. Future transportation options including rockets, drones, driverless cars, trains, taxis, and personalized transport - all will coexist, allowing consumers to pick the best suited mode. Vertical, horizontal and lateral means of transport will cross connect into cities, buildings and work-spaces to ensure the most efficient and sustainable method to get users from point A to B. Along with this, most mode of transports will be adapted to suit working on the go.

4. Changing Per Person Density

The rapid alterations in technology has helped reduce the per person density from 200 SFT in the 90's to about 100 SFT today. In coming years, this density is expected to further descend to 60 SFT / person as the requirement to provide dedicated desk to each employee gets substituted by activity-based settings. The major factors for this change are reduction in the device sizes, millennials' focus on informal work settings and the businesses' need to reduce their real estate spends.

5. The Eventual Transformation

Today, all assets that provide work, live and play solution are idle 25% to 50% of the time. Current data show that cities are accountable for 60% - 80% of total energy consumption worldwide. While individuals work, their homes remain empty; and vice versa. It will not be long that we will see spaces that will act as workspace during the day, entertainment zones by evening and sleep zones by night ensuring 100% utilization of the asset.

Keeping the above trends in mind, the driving demand for workspaces will concentrate on flexible



leasing as the face of real estate market in India is revamping.

In the next few years, office rents are expected to rise across India. From defining the future of corporate ethos to the changing dynamics of office spaces in India, coworking is set to be a game changer.

THREE MEGATRENDS WE WILL SEE IN THE 'PLACE' ECOSYSTEM

CO-WORKING WILL
CONTINUE TO RISE

FLEXIBLE LEASING WILL BE
THE GAME CHANGER

ASSET UTILIZATION ACROSS
SEGMENTS WILL IMPROVE



Sumit Lakhani is the Chief Marketing Officer of Awfis Space Solutions which is India's largest network of co-working spaces. With over a decade of experience spanning across Investment Banking, Private Equity and IT Services sector, he has played a key role in shaping impactful ventures.

Sumit joined Awfis at the inception as part of core management team and heads Demand & Supply side function at Awfis. Key responsibility areas includes Sales, Marketing, Real Estate Acquisition, Fund Raising and Strategy. Previously, he has worked as Vice President with the investment banking team at Yes Bank. His earlier stints include Tesco and ST Asset Management, Singapore.



PRACTICES

PRACTICES FOR REINVENTING
THE FUTURE OF WORK



Vikrom Mathur

Founding Director, Tandem Research

Inclusivity and diversity in the Future of Work

The so-called Fourth Industrial Revolution (4IR) will transform the world of work. A cluster of digitally driven technologies - robotics, automation, artificial intelligence and the internet of things are likely to reshape our economies, disrupt the current patterns of production and business models. While exact numbers are disputed, automation could lead to large scale displacement and re-organise the labour market. Undoubtedly, we can expect productivity and efficiency gains, but the ubiquitous spread of 4IR technologies could not only reproduce but also entrench existing labour market inequities. Those who lose out in the churn in the world of work are unlikely to be the ones who gain from new opportunities.

Tandem Research's analysis on Emerging Technologies and the Future of Work in India and Sri Lanka reveal that technological adoption will have a differential impact on workers across skill levels. Global conversations around automation are not readily applied in the context of emerging economies. Job roles in low skill, non-cognitive, repetitive and manual labour are unlikely to be displaced by automation, as large scale technological adoption will not be economically viable. Thus, those employed in these jobs are not likely to have their work automated, however, they will be impacted by the increasing contractualisation and informalisation of work enabled by the platformalisation of work. Middle skill jobs are more likely to be automated most rapidly. Social mobility of rural youth may be hindered as entry level jobs in organised sectors will be impacted. These job roles presented opportunities for those previously in informal sectors to enter the organised sector.

Women will be particularly impacted by the automation of low skill, non-cognitive, repetitive, manual jobs

as these are the roles that they largely occupy. On the other hand, those in high skill work which involve cognitive and creative skills, like programming, graphic design or computing will likely be able to enhance their skills using technology, allowing them to occupy higher skilled and higher paid jobs.

We must recognise the centrality of digital fluency to the future of work. Digital skills will be foundational for workers in the future as technology mediated work increases. Those with poor access to digital tools will be adversely affected. This includes women, those in rural areas, low income populations with poor access to educational institutions and digital infrastructure, and historically excluded groups based on caste. The digital divide will have to be closed by improving access to infrastructure and literacy to give workers from different backgrounds a fair chance.

Existing conditions in labour markets like widespread non-standard employment relationships, socio-economic inequity, gender inequality, socio-cultural norms will inform the impact of technological adoption on workers and access to technological gains. Re-skilling initiatives, careful policy steering, and investment in human capital and public institutions will be crucial to ensuring that the future of work is inclusive and diverse. Technological adoption could replicate and exacerbate existing inequalities, while affecting social mobility and having differential impact on workers across skill levels. The social and political consequences of an educated and aspirational youth who are trapped in manual labour with little opportunities to move up will be grave.

Vikrom is the Founding Director of Tandem Research - a Goa based research collective conducting interdisciplinary policy analysis at the interface of technology, sustainability and governance. Vikrom is an anthropologist of science and technology. His research focus interests include: the governance of emerging technologies, social and cultural dimensions of socio-technological and sustainability transitions. He has a PhD from the Institute of Science, Society, and Innovation at the University of Oxford.



Naomi Climer, CBE

Past President of the IET, Co-Chair of the IFOW, UK

Framework for meaningful work

The nature of work is changing. People are working alongside automation and artificial intelligence. They are outsourced workers for companies on the other side of the world. They are gig workers who use technology platforms to connect them with work from manual labour to professional engagements. As the nature of work changes and many more people are in new types of jobs with less clear employment status, there is an urgent need for new thinking about the most appropriate policy architecture for supporting a 'people first' approach to work.

It is important to care about not just the quantity of available work, but also the quality. There is plenty of evidence that work has a broader role in society than just as a source of income. Building a future of good work is likely to be the best way to reconnect new wealth with raising living standards, promoting wellbeing, bringing purpose and reducing poverty. So, ensuring the availability of good work should be repositioned as the foundation of a modern moral economy.

To support good work as a foundation for society, the Institute for the Future of Work has published a Charter creating a framework for the future of good work that meets these needs. It sets out key ethical or 'moral' principles that characterise good work.

The Charter pulls together diverse evidence streams, connecting perspectives from moral philosophy, law, economics, trade unions and business. It also draws from a number of national and international initiatives aimed at making work fairer and better. Each serves an important function. We think that if they are drawn together, their impact and influence will be amplified. Together, they will be more powerful in laying the foundations of a modern moral economy.

The Charter is an organising framework for policy-orientation and practice designed to encourage commitment and fresh-thinking from government, business and the engineers designing workplace technology about the fundamental components of good work. A government could use it to inform their industrial strategy. A business could use these considerations when planning the introduction of automation. An automation designer could use it to inform the design and operation of workplace technology. We believe that if people and institutions prioritise the creation of future good work based on the principles in the Charter and facilitate a broader dialogue about the social and economic conditions needed for future good work, it will lead to positive practical outcomes.

THE GOOD WORK CHARTER

ACCESS Everyone should have access to good work	FAIR CONDITIONS Everyone should work on fair conditions set out on fair terms	DIGNITY Work should promote dignity	WELL BEING Work should promote physical and mental well being	PARTICIPATION Everyone should be able to take part in determining and improving working conditions
FAIR PAY Everyone should be fairly paid	EQUALITY Everyone should be treated equally and without discrimination	AUTONOMY Work should promote autonomy	SUPPORT Everyone should have access to institutions and people who can represent their interests	LEARNING Everyone should have access to lifelong learning and career guidance.

Naomi is an engineer and leader, her career has been spent in the Broadcast and Communications technology industry including technology leadership roles at the BBC, ITV and Sony both in Europe and the US. Now Naomi focuses on the role that technology will play in the future and advocates for technology as a force for positive change, highlighting the changes we need to make as a society to better equip us for this future. Naomi is the Co-Chair of the Institute for the Future of Work, Non Executive Director at Focusrite Plc and Sony UK Technology Centre, Past President of the Institution of Engineering and Technology, Trustee at the Royal Academy of Engineering and Chair of Council at the International Broadcasting Convention. Naomi was awarded a CBE in the Queen's Birthday Honours of 2018 for services to the engineering profession.



POLICIES

POLICIES REDEFINING
THE FUTURE OF WORK

**Sheahan Verghese**

Practice Head – Labour
& Employment Law, TLA
Advocates & Legal Consultants

**Anjana Ravi**

Lead Associate – Labour
& Employment Law, TLA
Advocates & Legal Consultants

The law (in brief) in the Future of Work

The 'Future of Work' has come to describe those trends, changes and factors that are/will influence employment and the workplace dynamics and relations. The future of work discourse is informed by two key talking points: one, the automation of various functions performed by labour (thereby replacing the labour itself); two, the "fissuring" of the workplace, where regular employees are replaced with independent contractors or freelancers. The latter has given rise to the growth and talk of the 'gig economy' and the main actors in them – 'gig workers'.

While the pervasive impact of automation in the Indian workplace is still moot, the fissuring of workplaces and the advent of the gig economy raises certain legal and policy level questions around the place of gig workers in the labour law landscape of the country and the need, if any, for labour rights protection.

Hiring gig workers reduces organisational and importantly, for this discussion, statutory and compliance costs - minimum wages, social security contributions, maternity benefit, termination costs, etc. Gig workers, in turn, can work with multiple firms and diversify their experience and exposure. All seems symbiotic.

However, legal reality can be quite different. Gig workers are supposed to be, first and last, independent contractors – a contract 'for service', and not 'of service'. Which means, absence of controls. Accordingly, they fall outside the definition of 'employee', the protective cover of labour law, and entitlement to labour rights and social security benefits. While hiring organisations couch the relationship document in perfunctory language designating such independent status, the factual relationship matrix can be quite different. Control over not just the 'what' (to do) but the why, how and where, can be extensive.

The current law in India uses the tests of control and functional integration to establish a regular employment relationship between the hirer and the hired. If an employer is exercising control over a gig worker's deliverables, performance, discipline, growth, work tools, etc., akin to a regular employee, and otherwise integrates and perpetuates the gig worker into the regular business and core functioning of the firm, then an Indian court may classify such a worker as a regular employee.

With such classification, all attendant labour rights and statutory benefits, including statutory severance (where a gig worker has been terminated) will become a reality. Clearly, careful heed to the documented and factual relationship with the gig worker is imperative.

AUTOMATION AND FISSURING OF THE WORKPLACE

REGULAR EMPLOYEES REPLACED WITH FREELANCERS / CONTRACTORS

REDEFINING WHAT 'EMPLOYEES' MEAN

FOCUS ON BLUE-COLLAR WORKERS NEEDED



The need for labour rights, labour law protections and statutory benefits, would be more acutely felt by blue collar gig workers such as cab drivers and delivery personnel, whose earnings may not be commensurate with working, living, health and retirement costs. Also, an aspect affecting all gig workers, is the lack of earning protection during non-working periods (unlike regular employees). For example, a regular woman employee on maternity leave continues to earn wages and accrue benefits, while a female gig worker taking time off for maternity, will not.

So clearly a need for some legal and policy focus. An early indicator of government thinking in this direction is the draft Code on Social Security, which defines gig workers, platform workers, etc., and leaves it to the centre and states to formulate

law and policy around extending benefits to such workers. Policy appears to be to keep gig workers outside the formal employment regime, to strike a balance between ensuring growth of the gig economy and affording such workers, some protection. However, when it comes to providing benefits to such workers, many logistical issues arise as these workers may be employed with multiple firms. Fundamentally, definitions of such workers may need more elaboration, along with their employers.

There's a lot to think through now, even despite it being and possibly because it is, the 'future of work'.

Sheahan Verghese is the co-founder of TLA [Tree of Life Associates], a boutique law firm with depth of understanding and domain expertise in Technology & Outsourcing, IP, Privacy law, Labour & Employment matters, Sports law and Start-Up legal offerings. Mr Verghese's focused domains are employment, technology, outsourcing, transactional IP and privacy law and he is the Practice Head of these areas at TLA, Bangalore. He specialises in cross-border and local technology deals and techno-commercial contracts, including outsourcing, technology transfer, collaboration, reseller and licensing transactions (including software, gaming and SaaS contracts), and software services supply, sourcing, reseller, subscription and other commercial contracts related to the development, licensing and use of the software. He also advises technology start-ups and mobile application developers on their IP protection, development and commercialization strategy. He advises on legal and regulatory issues in the new age and emerging technologies such as IoT, AI and cryptocurrency as well.

Anjana Ravi works in the employment law team at TLA, Bangalore. Anjana's focused domains are employment, technology and privacy law. In labour and employment law matters, she has specific focus and expertise in, reductions in force (RIF), equal opportunity and disability policies, contingent workforce and staff augmentation, workplace privacy and structuring of wages, benefits and compensation.

IET's Vision for Future of Work

The blistering pace of technology is beginning to push boundaries of every industry, dominating the discourse around future of work in India and around the world. While many are anxious about the future and what it beholds for organisations and employees, we realised this isn't a time to sit back and wait for events to unfold. It is no more about some 'far future' of work because the change is already happening. Technology is changing how people work, the terms on which they work and the skills that employers seek. Hence, it is time to start a mature conversation about the future and kickstart a thinking about the many possible scenarios that could develop, and how to best prepare for them.

With this thought, the IET Engineering the Future of Work conference held on October 22, 2019 was designed to discuss and assess the Future of Education, Future of Organisations, Future of the Professionals and Future Frameworks. The event had over 100 experts and 30 industry leaders get together to help create a neutral, credible and inclusive platform to address one of the largest and most complex workforce in the world; the Indian workforce. The discussions at the event encompassed the 5Ps framework that we envisioned and defined in this playbook, broadly focusing on the forces shaping the future, the trends around technological changes and their impact on work and workforce, who leads the people strategy, what the workforce and workplace looks like and the organisational challenges associated with them.

The event drew a parallel between the IET Engineering the Future of Work Playbook's perspectives on People, Platform, Places, Practice and Policies for the evolving world of work and the vision for creating a concrete roadmap for the future of work. Some of the discussions at the event were around the following:

- Increased automation and digitisation is impacting every level of business and its people.
- There is a need to embrace technology as a force for good.
- Organisations can't protect jobs that are redundant but they need to protect their people by nurturing agility and adaptability.
- As the workforce is trending towards independent, freelance and informal labour; reskilling and upskilling of employees is an urgent imperative. It is time for a vision of having a human centered agenda that is based in investing in people's capabilities.
- Workplaces of the future are being dominated by the digital natives. There is a need to optimise human performance to create healthy workplaces.
- Management vision of organisations, policies, procedures, and structures need to undergo a paradigm shift to ensure the continued relevance of business and employees and ensure their sustained growth.

Future of work is a result of many forces of change affecting three dimensions of any organization: work, workforce and workplace. What work can be automated, how the workforce can be made prepared for it and where the work can be done are some of the challenges we tried to address through this playbook and the IET Engineering the Future of Work event. With this, we have taken a step towards creating a preferred future for meaningful work for organisations and individuals.

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The Institution of Engineering and Technology is one of the world's largest engineering institutions with over 168,000 members in 150 countries. It is also the most multidisciplinary institution- to reflect the increasingly diverse nature of engineering in the 21st century.

The IET is working to engineer a better world by inspiring, informing and influencing our members, engineers and technicians. Over the last decade, The IET led think tanks in India have been at the forefront of constructing neutral platforms that work closely with academia, industry and the government to create feasible roadmaps built around segments like STEM Education, Internet of Things and Future of Mobility & Transport. Being a neutral non-commercial platform, we are able to get various industry leaders from competing organisations as well as representatives of the academia and government on the same platform to build implementable roadmaps.

The IET's think tanks are led by member volunteers who passionately want to create positive impact in these areas through technology. We have now created a neutral, credible and inclusive platform to address one of the largest and most complex workforce in the world - India.

If you are interested to play an active role in shaping the future of work in India, please write to us at **akaveri@theiet.in** or **ujanighosh@theiet.in**

Visit: **www.theiet.in**