FOUNDATION OF DIGITAL BUSINESS

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Lecture 39

Lecture 39: Workforce of the Future

Good morning. Continuing with the last module of Futurity Organization, the next session I want to touch upon is the workforce of the future. For this, I referred to an extensive study done by Price Waterhouse Coopers, a major famous consulting organization, where they discussed various forces according to them, forces which will be shaping the future of workforces. There could be various ways it may impact the workforce, but we do not know; nobody can really predict how things will move. There are a lot of uncertainties in the future of the workforce.

We should know about all the possibilities. That is why I thought I would refer to this study because it has covered four types of models. It gives various scenarios. Scenario 1, 2, 3, 4, something like that. What it will be or it could be a mix of 1 and 2, 2, 3, 4, whatever, etcetera, but we should be aware of what could be the impacts, and the main thing is how we should adapt ourselves to this change.

Things are going to change; nobody denies that. Because of technology, it will definitely change the way we work. If you take the simple example of working remotely, which was brought in by what? Not technology, it was brought in by a disease called COVID-19, but then technology jumped in to make it possible. Literally, it did not stop completely. So, everything sort of initially was a bit slow, but then it took off,

And business almost became normal. Life also became almost normal after the initial few days. Just imagine the entire education system shutting down. Everybody had to study from home, starting from the lowest—I mean, you forget about B-schools or engineering colleges, etcetera. Engineering colleges had their own problems with practical labs, etcetera. But just imagine schools—if you go down to nursery schools, primary schools,

junior schools— Young kids, 5, 6, or 7 years old, had to log in using a smartphone or computer and attend classes. That brought in another big question called the digital divide. So, that is about how the haves and have-nots can differentiate your basic things, like you have to start studying in a school.

So, are you able to study—yes or no? Do you have a smartphone? No. Then how will you attend class? You cannot attend a class.

The digital divide will play a very prominent role going ahead, even in business, etcetera. If you are not digitally equipped—or if you extend that thought—if you are digitally— It can so happen that you are not tech-savvy, you do not like technology. I know some people—many of my acquaintances—who do not use smartphones, for example, or they do not use net banking, for example. So, they do not trust, and some people even do not use UPI, for example, because they have a fear factor. They do not trust the system. They have a feeling that they might get scammed,

and lose money, but somebody they do not even know uses a smartphone. I am not talking about old people; I am talking about young people, middle-aged people, and educated people whom I know. And I am sure most of you also know some of these. These percentages are very low, but still decreasing—hopefully—but they still exist in today's world in 2025. So, the business leaders need to note the following: act now, take risks, and build a clear narrative. Make no-regrets move that work with most scenarios, but you will need to take some. Automation causes anxiety that kills confidence and the willingness to innovate.

From the fear factor, from the anxiety, it kind of acts like a brake. You do not want to take a risk, do not want to jump in, do not want to experiment, do not want to innovate. Make a bigger leap; do not be constrained by your starting point. You might need a more radical change than just a small step away from where you are today. So, accelerate, move.

Own the automation debate. Automation and AI will affect every level of the business and its people. It is too important an issue to leave it to IT, HR, or some other people. Everybody has to own that debate that automation is here to stay and AI. You cannot wish it away. Same as net banking, for example, or e-government services you take—it has gone to the village level, the panchayat level.

Everybody knows that they need to have internet and a device to access those services. You need to have an other number and a bank account to get government subsidy and that is going to the lowest level. It is reaching every state of the society. Same is true here if you take it from an organization perspective. People not jobs, organizations cannot protect jobs which are made redundant by technology that is for sure, but they have a responsibility to the people.

Protect the people not the job, what it means is if a job a particular type of job has to disappear has to go be replaced by automation or technology. So, we do not try to protect the job. Instead try to focus on the people who are doing those job whether they can be or they need to be reskilled, retrained and redeployed. Think about the people not the job, if the technology comes in the job will go you cannot stop it, but you have to be responsible for the people. Nurture agility, adaptability and reskilling.The forces that are shaping the future, technology breakthroughs,

rapid advances in technological innovation, automation, robotics and AI are advancing so quickly that dramatically changing the nature and the number of jobs which are available. Technology has the power to improve lot of things, but it also brings in the threat of social unrest. Demographic shifts, the changing size distribution age profile of the world's population. The world's population is aging, birth rates are dramatically decreasing in many advanced countries. Examples South Korea, Japan, Nordics, Europe it is negative growth rate.

The overall population is gradually and not only gradually some places South Korea and Japan is quite drastically sinking. The aging population, increasing lifespans, and fewer births are contributing to this trend. You can imagine the demographic shift which has happened and it is continuing. Older workers will need to learn new skills and work for longer. So, the retirement age will theoretically probably increase from the 60s to the 70s or something like that.

A shortage of human workforce in rapidly aging economies will drive the need for automation and productivity enhancements. That is why those countries will have more of robots in Japan than any other place. You have robots in restaurants taking orders, serving food, etc. Rapid urbanization is significantly increasing as more of the world's population moves to live in cities. By 2030, the UN projects that 4.9 billion people will be urban dwellers, and by 2050, the world's urban population will have increased by about 72 percent.

All that will create its own problem and those problems will need to be solved through technology and automation most probably. A shift in global economic power toward developed and developing countries is happening—we are seeing and feeling how some countries are rising while others are declining, etc. Resource scarcity and climate change are another big concern. Depleted fossil fuels, extreme weather, rising sea levels, and water shortages—all of these will have a major impact on our society and, of course, on the way we work. So, new types of jobs in alternative energy, engineering processes, product design, waste management, and reuse will need to be created.

These are also kinds of opportunities where people who will be replaced by AI and automation can redirect their skills to such technological areas to solve these problems. Or work on these problems created by resource scarcity and climate change. Now, digital and AI are changing the workforce. One is assisted intelligence, augmented intelligence, and autonomous intelligence. So, you can probably classify them into three categories. Assisted intelligence is widely available today; it improves what people and organizations are already doing.

A simple example is prevalent in cars today, like GPS navigation programs. That is assisted intelligence—it offers directions to drivers and the entire food delivery system, like Swiggy, Zomato, Uber, and Ola, is possible only because of these GPS navigation tools. Now, what is augmented intelligence that is emerging today? It enables people and organizations to do things they could not otherwise do. For example, the car ride-sharing business could not exist without the combination of programs that organize the service.

All these tools can be considered augmented in agency because, with these tools now available, I can do the following things. Autonomous intelligence is the most important one today and is being developed for the future, establishing machines that act on their own. An example of this will be self-driving vehicles when they come into widespread use—they are already here, and by 2026, many cities will have driverless cars, taxi services, and similar innovations. AI could create a world where human abilities are amplified as machines help mankind process, analyze, and evaluate the abundance of data that defines today's world.

Allowing humans to spend more time engaged in high level thinking, creativity and decision making, this is what many will talk, many questions are asked, this driver goes, this job goes, this job profile vanishes, what will these people do, then we can of course, the high level policy makersWe will say that yes, you can spend better time doing

something else—creativity, decision-making, etcetera. And then the question of universal basic income is also very actively discussed when a mass level of people get displaced from work and they do not have any alternative work. Then, how to take care of such affected people?So, various questions will keep coming up for which today we do not have the best answers. What this study PwC study did they classified this into four worlds of work in 2030.

So, they took 2030 as one of the target years—what will the scenario possibly be like five years down the line? So, one of them, the first one, is the red world, which is where innovation rules. Organizations and individuals race to give consumers what they want innovation outpaces regulation. Everybody wants to innovate something new. Digital platforms give outsized reach and influence to those with a winning idea.

Specialists and niche profit-makers flourish. So, we are now only looking forward to a workforce of people who can innovate. New products and business models develop at lightning speed, far more quickly than regulators can control. Everybody is racing against time to come up with some new idea with the help of this automation technology and tools to deliver something for the customer. Regulators cannot not be able to keep up the pace.

This is an imaginary scenario which they think and if this cutting red world innovation rules can happen say in 2030. Technology encourages the creation of powerful like minded cross border social bubbles, businesses innovate to create personalization and new ways to serve these niches. The workers know that the most sought after skills will mean the biggest reward package.And they keep moving jumping from organization to organization where there is more demand of that particular skill because everybody is looking for skills, talents who can innovate use automation technology to find out a new app or new model or a new application. So, they will be in high demand and obviously, when it is question of demand and supply and certain skills are in high demand, we have all been seeing that we see that now also and there will be

attrition and they will keep changing their employers with higher rates.So, what does the characteristics of the workforce of 2030 in this type of if it is a red wall it will look like. Specialism is highly priced workers seek to develop at most sought after skills to command the biggest reward package that I was talking about. A small number of pivotal people with outstanding management skills will command high rewards. Like minded workers will gravitate towards each other aided by technology sparking bubbles of

innovations. They will form cohorts where they can combinedly come up with new ideas and projects quickly flourish evolve and resolve and specialists move rapidly from one to the next.

So, this is how the characteristics of the workforce of 2030 will look like in this red world. Again this is a imaginary situation. Now, there is a blue world where they say the corporate will be the king. Like for example, in 2030 India's largest tech companies announced a 24 percent increase in annual revenue largely attributed to its introduction of cognitive enhancing drugs for its workforce. Now, do not get surprised this is what they say that corporates the organization will give certain things.

And here, they are thinking very abstractly that they might even give a cognitive skill-enhancing drug. Workers may be made to take some drug which will increase their learning capabilities. So, the workers in the blue world face relentless pressure to perform. Exceptional talent is in high demand, and employers secure a core group of pivotal high-performance performers. By offering them excellent reward etcetera and otherwise buying flexible talent and skills as and when they are needed. The gig economy, where you do not hire people for life—you just take them on a project-to-project basis or a need basis. And those skills, obviously, belong to the highly talented ones who are in huge demand.

Human effort, automation, analytics, and innovation combine to push performance in the workplace to its limits. And human effort is maximized through the sophisticated use of physical and medical enhancement techniques and equipment. So, workers will be provided with both physical equipment, technical equipment, and physical means—some medicine or drug or performance-enhancing superfood, for example. So, performance and well-being will be measured, monitored, and analyzed at every step, and a new breed of elite super workers will emerge. This is the blue world where corporate is ruling.

Now, let us take a look at the green world, where the company is caring—the other dimension. The need for a social conscience is paramount. Workers and consumers show loyalty towards organizations that do right by their employees and the wider world. Automation and technology are essential elements of the green world, as they help protect scarce resources and minimize environmental damage. So, you are using AI tools to control that damage, etcetera—environmental challenges, to meet environmental challenges. And technology is used extensively to replace the need for travel, driving rapid innovation in communication technology.

One of the major causes of environmental damage carbon footprint is travel like we burn lot of fuel in airlines travel road rail everywhere. If I can use technology to minimize travel I am helping the green movement. The question of where people fit into the automated green world is still to be answered. Technology is a double edged sword for green world employers. It allows them to meet their ethical and environmental agenda, but the question is come see at what cost to the humans.

The workers are expected to reflect the values of the employer both at work and at home through organizational pledges. So, the workers or the employees will need to agree with this green movement of the corporate strategy and both at your workplace and also at your home. The travel is tightly controlled and monitored and there are incentives for inventing and efficient use of resources. You are incentivizing people not to travel much, spend less on fuel, energy so that you can make this green world a better more reality and that is the company the corporate agenda.

The company is caring for the environment. Now the fourth one is called the yellow world where the humans come first. So, now the companies are thinking about the employees. In 2030 the made by me quality mark indicating that no machines have been involved in production achieves worldwide recognition. Now this is something very drastically opposite.Like we see many food products being advertised as organic food say rice, dal whatever

and the price will be more that for this food no chemical was used they certified that no artificial chemical was used etcetera. So, something like that—something very similar—we will say that no AI tool was used for making this particular product. So, a strong desire for fairness in the distribution of wealth, resources, and privileges drives public policy, leading to increased government intervention for consumers and workers. So, people are now advocating for the equitable distribution of wealth. So, this is something we do not see much in our capitalist world—or probably extreme capitalism,

where we see some super-rich people—a number of super billionaires—and people have sort of gotten used to it. And super-powerful oligarchs—we call them organizations—they are becoming the tech giants, the tech leaders. They are almost controlling the political situation also, influencing Facebook. And others—Googles, the Amazons of the world, or the Teslas, Elon Musk—we are seeing the influence that these people can exert in running a government, for example. And right now, today, as I speak, there is a lot of trouble going on between Elon Musk and Donald Trump. One of China's richest person

Jack Ma, the founder of the famous company called Alibaba, I mean the Chinese government somehow suddenly felt that Jack Ma is going

much way above his level and becoming too powerful for the government.So, the government went after him and Jack Ma had to run away from China probably now he is staying in Japan. Workers find flexibility, autonomy, and fulfillment working for organizations with a strong social and ethical record. This is the collective response to business fragmentation—the desire to do good for the common good. So, today also, we have many organizations known for their social activities—well known for their corporate social responsibility work. And many people—many employees—feel proud to work for such companies.

In fact, that is one of the strategies used by organizations, I would say, to attract talent. So, when they advertise, they mention that they do such good things for society, which helps give you a sense of pride in joining those particular organizations. Our invisible technology, such as AI-driven back-office functional support and the automation of tasks that are damaging or impossible for humans, will still continue. This back-office automation will not go away, even in this yellow world where humans come first. So, like I said just a few minutes ago, do not look at the job because the job will go away, but look at the person.

People management challenges in 2030. Performance is obsessively monitored and measured, often in real time. Excellent incentives are offered for the best talent as long as they perform. Development is concentrated on a small core group of high potentials. HR uses advanced analytics to predict future talent demands and to measure and anticipate performance and retention issues.

So, you can see the effect of AI in HR. One is that HR can predict future talent requirements based on the nature of work, the business, etc., which is a good thing, and it can measure and anticipate performance and retention issues. So, your annual performance, etc., which is being monitored, can be predicted by AI tools to forecast what your performance will be in the coming years. And also whether you are a retention challenge or thinking of attrition. So, all of these can be assessed by AI tools.

Sensors and data analytics measure and optimize performance continuously, and technology powers the real world, but performance is judged primarily on short-term results. So, as we are talking about the real world where technology is king—innovation and technology—but your performance will be judged primarily on very short-term

results. So, what does this mean for the jobs in this 2030 model, which was developed by PwC? They took a detailed look at various dimensions of what can happen. So, what does this really mean for jobs? As more individual tasks become automatable through AI and sophisticated algorithms, jobs are being redefined and recategorized.

A third of people worldwide are now worried about losing their jobs to automation, which is a fact—people are really worried about what is going to happen. You do not know. It is clear that automation will result in a massive reclassification and rebalancing of work. The nature of work will change, so the skills required will also change. It is said that in the next five years, 50-60 percent of the skills we are equipping—for example, MBA students with now—will not be required. So, whatever they are studying now—acquiring these skills—almost 50 percent of them will not be required five years down the line. They will need new skills.

Workers performing tasks that automation cannot yet handle become more pivotal. This means creativity, innovation, imagination, and design skills will be prioritized by employers. Finding the skills CEOs need has become the biggest threat to their businesses. They say the skills they are looking for are particularly telling: problem-solving. So, CEOs are now wondering, 'What sort of skills do I need?'

Problem-solving skill, adaptability skill, collaboration skill, leadership, creativity, and innovation come at the top of the list. So, these will be skills: problem-solving, like prompt engineering, will be a new skill; adaptability—how can I keep changing; collaboration; leadership, of course; and creativity and innovation. And what does this mean for the job? Pivotal talent is the ultimate prize. Automation of routine tasks will encourage increased specialization or specialism.

We see in all these four walls that those workers with the critical skills that organizations need will become the ultimate prize. Whether they are full-time employees or contract workers, gig workers. They will be called the pivotal people. Those who contribute outsized, absolutely crucial value to the organization. Finding and keeping these pivotal people will be a huge challenge in every world—in all those red, blue, green, and yellow.

They will be hard to find and difficult to keep. And the risk of losing these pivotal people to burnout, or early retirement—that can happen in that red world situation where everybody is running to find out, do something very fast, highly competitive—will be a constant worry. So, people will talk of early retirement, and people are already talking of early retirement, but this trend can probably increase. So, working together as a society.

We are working for an organization, but ultimately, we are also part of the bigger society. So, governments, organizations, and society need to work together to develop responsible approaches and policies that govern the impact of technology and automation on jobs, including a clear discussion on the ethics of AI. Can we restrict AI, for example, in some areas? Governments can do that—implement policies, and governments together can work. That is one of the things I was talking about in the previous class where about 100 great people—scientists, entrepreneurs, and CEOs—had signed a letter requesting that research in AI should stop for six months.

We need to take stock of the whole situation—where it is heading, whether it can be handled or managed, or if it is acceptable to society. So, governments will need to address the issue of unemployment driven by technology. And that is where people are already talking about something called universal basic income, where everybody gets a minimum amount from the government, job or no job. And expect the unexpected.

So, use these four worlds to consider how different the world could look and plan for multiple scenarios and outcomes. That is why the study is so important. So, look at it from four different angles. Adapt to survive. The human race is infinitely adaptable, but we are also risk-averse. So, we do not like taking risks.

And lastly, jump on a passing ship—there is no one future-proof carrier, only better options for you. Determine how to get to the next better thing. Again, in a humorous way, during one of the discussions, somebody was saying that the only profession guaranteed protection is, say, the barber or even the dentist, for example. These are the professions which are guaranteed not to be eliminated by AI, but that also may not be true—I mean, it can automate the hair-cutting process and things like that too. Build a future-looking understanding of how humans and machines might collaborate to deliver the corporate purpose. And create an open and transparent narrative on how things are influencing planning and delivering on this future of work for the organization, for society, and for every individual.

Clarify how robotics and artificial intelligence can enable the redesign of work, enhance productivity and customer experience—all ethically—and enable a focus on more value-added tasks. And use sophisticated workforce planning and predictive analytics to plan for talent pipelines in multiple future scenarios. Why this is so important is that once you have this idea of what the future talent requirement is, then you can plan your reskilling program. You have to think of the people—remember, I keep saying to think of the

people, not the job. So, I have people, and I have to look for them to adapt to the new job situations. We design traditional HR programs and policies to deliver on new learning and development models, career paths, capability models, and redesign of jobs and compensation frameworks.

So, this is a major HR challenge. And I thought towards the end of my course, I would touch upon that because ultimately, it is people that matter. So, we have to think of everything from the perspective of how to take care of people, resources, and talents in this new world of AI and digital technology. With that, I will conclude this session. Thank you very much.