

Kerala workforce strategies for the fourth industrial revolution

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I picked up three important trends that are happening in the new work force evolution. I wanted to say about the progress of internet mobile and social media, especially in the country stands number 2, compared to the rest of the world. In fact, we are sitting in a state which is having the maximum density of mobile penetration in the whole country. So this is one interesting trend that has revolutionized the digitization process, new business models and the whole world transforming into the new internet economy. The second part of it is the impact of industry 4.0 which is again sometimes being misunderstood or misconstrued as an IT revolution. But this is not; this is actually an industrial revolution that is happening quickly. I think we have seen three industrial revolutions and this one is about converging the physical world to the cyber world and the biological world. Primarily because the cyber world has grown so much and on an average, there is a statistic which states that people spend around six and half hours on mobile these days.

The World Economic Forum 2020 report say that around 85 million jobs would perhaps get displaced or shifted. But the beauty is that around 97 million new roles would emerge as part of the industry 4.0. So what I mean to construct is the fact that there is a huge change in dynamics in terms of the roles and responsibilities and in terms of the work that is going in the Industrial Revolution 4.0. Second construct is not about information technology related jobs. This is about IR 4.0 interfering and intervening successfully into multiple sectors, agri-business to mining to petroleum and natural gas businesses. So, this is going to spread across multiple domains and that is the reason why new jobs are getting created in different sectors, not just IT.

The third one is about the digital acceleration and innovation, primarily driven by the pandemic. One of the interesting trend that has come in as part of it is the acceleration of the

digitization that has happened. But thanks to Covid-19, it became the biggest transformation agent in bringing a lot of acceleration in the digital space.

So the physical world interactions became digitized and we are connecting more virtual. Companies like Zoom, for example, has grown 35 times during this time. So, there are a lot of changes that has happened into the digitization process. Telemedicine, for example, is another interesting case which grew by 400 per cent as per one of the reports.

It also created a new set of innovations into it. Frugal innovation became a little more accelerated during this period. In Kerala, we had a very interesting trend, whereby the startup mission sponsored companies came together and created the ventilators that were produced at very affordable price. They used technologies like 3D printing and IoT for creating such mechanism fairly quickly. So frugal innovation is another area that picked up as part of this strength. Lastly, the changing workforce dynamics, such as work from home and remote working became the new normal. Approximately 84 per cent of employers are set to rapidly digitize their workforce, so that the work can be pushed remotely. Even after pandemic sets in and goes out, it is likely that this trend will continue and approximately 44 per cent of workforce will remotely operate permanently.

The next context is higher education. Even though we call it as a higher education paradox, as the famous scientist says in the midst of every crisis lies great opportunity; so we feel that this issue of having low participation, especially women participation into the economic activity. Secondly, in terms of skills development, Kerala has been in the forefront on many areas when it comes to various indices that we talked about. Kerala started these skills development activity long ago before a lot of other states picked up. We have a number of initiatives focusing on sector wise skilling and development activity. Approximately hundred thousand participants go through the skilling program every year from Kerala. Interesting fact is that 23,000 new self-employed enterprises were generated during the COVID pandemic. 2500 plus active startups work in the state and is considered to be one of the top performers in the country.

Another important issue is the return of Keralites, with international exposure. Nearly 600,000 people came back and had to stay back due to the pandemic, but these are people who have got not just skills, but an understanding of the international work culture. This is what is going to create a new set of job roles and new set of job opportunities. Second one is about the gig economy push, even in India. This is picking up fairly big, in fact 50 million

Indians work on gig already from India. We are on the seventh position and there is a lot more potential for us to look at this.

So, on the knowledge enablement right from literacy to research, is a set of enablement that the state is undertaking that is leading into an outcome of jobs of various types. From an industry perspective, it is also important for the state to look at what industry needs, especially in the new technology area and talent ecosystem. Government support and benefits are some of the areas that the government is looking into. There are 3 broad contours workflow strategies that Kerala government is pushing forward and it was alluded by the Finance Minister also.

When we were looking at employment targets we look at only permanent jobs, but now the strategy is not just look at the permanent jobs alone, but look at work and effort based career types as well. The second dimension is that when we look at again, employment, we look at creating employment in the offices within Kerala. Now remote working has enabled people to work from anywhere. So we are not looking at just the statewide employment opportunity, but going global and looking at the global opportunities and how enable our youth for the same. The third dimension is that the career is not just about information technology on IR4.

We are talking about 60 to 65 million jobs being created in 2025. Of which, around 25 to 28 million jobs are going to get newly created with these three dimensions within India. Kerala is super poised towards achieving that target. One of key enabler is obviously the infrastructure backbone. Some of the IT infrastructure backbone, which are required for remote working and the distributed workforce management is also provisioned. Government supported skills training is also another important element of our strategy. But in this strategy, the fundamental differences are that we are actually on boarding the work types ahead of time and then working reversely to skill our candidates by matching it to the work types. So, it is much more collaborative and synchronized compared to the skilling programs that we have seen in the past. There is going to be a huge IT push connecting both the work seekers and the providers. I believe a lot of legal frame work have been developed on the new work type activities across the world. But providing social security and other government benefits is something which is going to be very unique for the whole strategy that the state is trying to build up and that's the core of the strategy. There is a lot of operational layers which we are working on and there is a huge set of targets that we are aiming at.