

ILO Office for Japan “The Future of Work” Interview Series #1 “Future of Employment in the Age of Artificial Intelligence”



(Photo credit: JILPT)

Interview with Ms. Reiko Kanda, Executive Vice President, Nippon Institute for Research Advancement (NIRA)

National dialogue on the Future of Work took place on 12 May 2017 in Tokyo co-hosted by the Japan Institute for Labour Policy and Training (JILPT) and the ILO. The forum discussions focused on key factors including technological innovations and aging population with declining birthrate, which are expected bring significant changes in the world of work. Following the forum, ILO Office for Japan had an in-depth discussion with Ms. Reiko Kanda, Executive Vice President, Nippon Institute for Research Advancement (NIRA), who was one of the panelists at the forum, on issues such as the future of employment in the age of Artificial Intelligence (AI).

1. Education and skills training

Sense of self-reliance critical for professional growth

ILO Office for Japan (ILO): In order to develop the strengths of humans in the age of AI, there seems to be a need to review the institutions for education and skills training appropriate for this age. Given that it can be increasingly important to develop skills for non-routine work, which is difficult to be replaced by the machines, such as communications and problem-solving skills and the ability to work independently, what education system will be able to develop these skills?

Ms. Reiko Kanda (RK): For education and training system, I think Japan, along with many other countries, have not been very successful in transitioning into the service economy. Many people work long hours with low wages, indicating that transition into manufacturing economy was successful, but the shift into service industry has been a struggle. Now, achieving a truly prosperous society with the shift into digital economy is a critical issue today. One of the reasons that the shift into service economy has not seen success could be linked to the general lack of the sense of individuals to advance their own career for their own benefits. Impact of education and skills training depends on the awareness of individuals receiving them. According to our research on career self-reliance, there are two types of self-reliance. One is for individual workers to develop career based on their own responsibilities and judgement. The second is for them to contribute to the organization as professionals towards the organizational vision. Until today, most Japanese workers have focused on contributing to their companies and organizations over proactively developing their own careers. This was especially the case as many had lifetime employment with one company. However, in the end, unless there is an awareness that professional development is beneficial for themselves, in addition to their organizations, there are limitations for education and skills development to help with their professional and personal growth.

More research needed on skills required in the age of AI

ILO: What kinds of framework for skills development and training, both public and private, are needed as there are notions that more professional, job-based work style will be increasingly common?

RK: First, there needs to be more research conducted by public institutions on what skills are needed in the age of computers. It is often said that creativity will be critical, but it needs to be more researched whether that is the case. In working more closely with computers, it has not been examined what humans will still have to cover. There could also be research on how to use smartphones in really beneficial ways, and how to view and react to fake news and what people are saying, for example. These types of research can be conducted by researchers in various technical fields as well as humanities and social sciences to examine how human strengths can be brought out in the computer age. That could include communication skills, and the findings should inform how the required skills can be harnessed in compulsory education as well as training by companies. Rather than only providing computers, this type of education will enable people to have a good command of computers.

There also needs to be more research on matching jobs with people based on their skills and abilities. This could be conducted by public institutions and university professors. Traditionally, expertise was defined vertically. However, cross-sectoral expertise and the ability to connect people from different fields will be the force to drive industries in the future. These abilities may be developed through self-education or with support from public institutions, but people that have both vertical and cross-sectoral abilities will be highly valued. In the U.S., the Occupational Information Network (O*NET), developed under the sponsorship of the U.S. Department of Labor, provides a comprehensive database on occupation to help job seekers with information on required skills and experiences for a variety of jobs. Japan needs a similar system and more experts on career such as career analysts. This type of system existed in Japan before but needs to be re-established, especially towards the future when individuals will enjoy more job choices. There is insufficient information available on career for people to refer especially upon finding employment or career change. In the U.S., this type of information including salary level, work to be performed, and

qualifications required for different occupations are facilitated by the government. It will be beneficial for public institutions in Japan to provide similar information. At the moment, many young people decide to work for big corporations partly because of limited available information on how career might be developed differently. Transparency of information in this regard can encourage diverse work styles. Additionally, as AI is adopted to perform more tasks, there needs to be a framework that can see and evaluate the details of the rest of the work that only the humans can perform.

2. Support to the self-employed workers

Voluntary associations for the self-employed workers

ILO: It was pointed out during the forum that in the face of the expected expansion in self-employment work, it will be critical to consider support to self-employed workers in addition to the traditional concept of labour law and social security that was developed to protect workers. What kinds of institutions and policies are needed for this?

RK: Self-employed workers have different kinds of challenges such as not receiving work orders, falling sick or losing credibility due to not being able to meet deadlines because of labour shortage during busy times. I think what might be useful for these workers is a more voluntary association based on mutual cooperation. With such voluntary associations, members would have insurance mechanism for when they lose jobs or fall sick at work, and they will have regular income as in mutual aid society. This could be similar to farmers' groups from the past, in which farmers shared equipment and worked together. This could be formed based on communities as self-employed workers are often the faces of communities, living and working in the communities. Also, there may be self-employed workers who might be struggling with their businesses, and such network can provide support.

3. Collective representation of interests for self-employed workers

Showcase models for more flexible work styles

ILO: It was also pointed out that as the self-employed workers increase, the traditional collective mechanisms to represent worker interests need to be reviewed, and new mechanisms explored. In your view, what institutions and rules are called for?

RK: Until today, employment has been centered on big corporation such as those that are members of KEIDANREN (Japan Business Federation). However, today, rather than focusing only on people working for big corporations, more direct attention needs to be paid on working environment for people working in small organizations including startups and small and medium-size enterprises (SMEs). Compared to negotiating for big trade unions consisting of more than 300 workers, working environment may be more easily improved for a smaller group consisting of people up to 300. Instead of setting uniform regulations targeted for large companies, more flexible rules should be considered that provide better working environment for people working in such environment including micro-enterprises and SMEs. Many working with SMEs are not knowledgeable about these benefits that come with new work styles, and there are plenty of room to develop and showcase models for more flexible work styles.

4. Safety net

Power of the community to support the people in need

ILO: What safety net mechanisms are needed for the people that lapse into unemployment and poverty?

RK: People that lapse into and remain in unemployment, or cannot get out of poverty have various individual reasons. It could be that they have to take care of somebody at home, or they have fears to go outside. Rather than one-on-one help, it should be a team of experts such as specialists on psychology and illness, as well as career analysts supporting one person. Such a team can visit the person's home, with consent, provide care, and follow up including on why he or she cannot maintain employment. This effort can be enhanced through support of the person's family and the community as a whole. Thanks to IT, there are also some jobs that can be done at home, and do not require working directly with people. This can be supported by career analysts that can provide matching of these jobs with demands for these jobs. In Japan, families have tended to singlehandedly take the responsibilities of caring for those staying home due to problems with adjusting to the society or developmental disabilities. Rather, it can be a wider society that provides support. For example, this support can be provided as a side job or volunteer job on the weekend, facilitating easier participation by many.

5. AI and productivity

Added value created by AI to be shared with workers

ILO: Various initiatives have been undertaken in Japan in order to improve labour productivity. However, Japan's productivity has remained stagnant among OECD countries. How can AI contribute to improve labour productivity in white-collar work and service industry?

RK: AI can streamline white-collar work and the service sector. For example, use of AI in law practice may enable research on case law to be completed in one hour that was done by ten people with vast amount of time. Another example is HIS, a travel agency, which has opened robot hotels where many functions are performed by robots. The way that AI allows the provision of new and different services should also be further explored. Current work style reform is focused on reduction of work hours or going home early. The work in manufacturing sector was based on hours worked, and people did not have incentives to finish work early. Similar to what I mentioned before, in order to utilize AI in a positive manner, the benefits of the improved quality of work through the use of AI should be returned not only to the company but also to the individual. Added value created through the adoption of AI should be reflected in additional salary or reduction of work hours to enable spending more time on hobbies or enhancing network. Adoption of AI will work better if its benefits are shared with working individuals. In order to ensure effective distribution of benefits reaped through the use of AI, it is critical that there are frameworks for workers to engage employers on the equal basis, which do not have to be limited to trade unions but include other mechanisms for engagement and discussions at various levels.

6. Innovation and startups

Diverse work styles can flatten the society

ILO: In the Silicon Valley, more startup ventures are conducting business on an equal footing with big businesses. What would you think is the key in supporting innovation and startups in Japan?

RK: If you look at the trend such as Fintech and Blockchain, these businesses are often operated by extremely bright and educated people often working in apartment rooms. In the financial sector, these people are working and collaborating with big businesses on the equal footing. If this type of trend appears in Japan, I think that can change the way that businesses are conducted in Japanese society. Rather than big businesses subcontracting work to SMEs, it will be a truly equal relationship in which startups and small businesses are utilizing technology and knowledge that big businesses do not have. Working and employment relations can be expected to be more diverse in the future, where some of the people working at startups may work for big corporations as employees and then leave the companies when the job is done. Emergence of such diverse work styles can be one of the factors to spark the flattening of the society.

7. Addressing inequalities

Sharing economy and side jobs to revitalize rural economy

ILO: Concerning inequalities between regions, what policies will be effective in addressing labour shortage and developing industries in rural areas?

RK: Flexible work style as practiced at Kesenuma Knitting¹ is a perfect example for style of work in provincial areas. In a similar manner, sharing economy can also be useful, as it allows one to earn 500 yen² using idle hours by driving somebody, for example. It is also possible for people living in cities to go to provinces over the weekend to work in these flexible styles for side jobs. These ways of working, not as one main job but as more flexible side jobs, could be good for provincial areas as well as for tourism. There are several initiatives that can be undertaken to facilitate this. Transport cost can be reduced, and vacant houses can be utilized and shared at a reasonable cost. Multiple businesses can be conducted simultaneously such as farming, operating stores, and giving tour. Train companies can provide discount for those that use the service weekly to go to provinces, which can be easily facilitated by Fintech.

8. Women and work

Women can flourish in a flat society created by AI

ILO: How is AI expected to affect women at work positively and negatively?

RK: AI can have significant impact on women such as those working as non-regular workers or on the part time basis. As many women possess good communication skills, if AI contributes to creating flat relationships in the society, women can flourish in such a society. Many women are good at important skills such as creating networks and connecting people. Many women currently do not work full time but either work part time or stay at home. Technology can increase options for women for work styles not based on time but on output. It can facilitate type of work that can be

¹ Kesenuma Knitting is a small company in Kesenuma city in Miyagi Prefecture producing hand-knitted, high-quality sweaters. It offers flexible work hours to work at home to people that cannot work outside the home due to commitment at home such as taking care of children or the elderly.

² Around 4 or 5 USD.

done at home or anywhere as long as the defined work is done and output delivered. In addition, for telework to be effective, work needs to be clearly defined, and what is expected of the worker also needs to be clearly defined. Workers would be evaluated against the clearly defined criteria including the deadline. This means that the process of creating the work has significance in itself. Creating conditions where one can work anywhere can also be critical in improving productivity.

9. ILO's role

Facilitate participation of Japanese scholars in global debate

ILO: As the factors that affect the world of work evolve, what roles are expected of the ILO?

RK: I was quite impressed with the keynote speech by the ILO Director-General, Mr. Guy Ryder at the "Future of Work" Forum. In many countries, including the U.S. and the U.K., theoretical basis for what to distribute to the workers, or policies centered on workers, in times of the rapid developments of technologies, have not been put forward by any political parties. What needs to be proposed is not only protection measures, but also policies to promote self-reliance of the workers. Theoretical framework in this regard needs to be developed at the global level. It can be the job for Japanese scholars to think of this in the Japanese context. We, at NIRA, are undertaking research projects involving economists and labour lawyers. It will also be great if the ILO can facilitate the participation of Japanese scholars in the global debate on these issues.

10. Meaning of "work"

A place where you can gain private and public experience

ILO: What does "work/to work" mean for you?

RK: Simply put, work is a place which allows you to have both private and public experience at the same time. On the one hand, it is your life and testament to how you lived. On the other hand, it is how you related to the society and how you are able to influence the society. It is a place where you can experience two quite distinct things, private and public, through one act. It is for yourself, but not only for yourself but also for the society and the organization. Work, along with community, is one of few places where you can experience these two distinct aspects through engaging in one activity. Work teaches you this, and in this sense, it is quite meaningful for all to experience work. Working at NIRA enables me to have a balance between having impact in the society through creating networks, and seeing what that means to myself. It allows me to play my part in a larger social trend.

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