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PREPARING PEOPLE WITH DISABILITIES TO FACE THE INDUSTRIAL REVOLUTION 4.0: POLICIES VERSUS ACTIONS

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ABSTRACT

This study aims at answering the questions on how the government of Indonesia stipulated a policy related to the rights of people with disabilities in facing the Industrial Revolution 4.0 and what actions have been taken in relevant with the policies set. This study employed a phenomenological approach to understand how participants experienced the phenomenon. Semi structured interviews were conducted to a total of 15 participants, consists of the representative of the Ministry of Research, Technology and Higher Education, Republic of Indonesia to get the perspective on what strategy and actions have been implemented to prepare people with disabilities in facing the Industrial Revolution 4.0. Interviews were also conducted to employed and unemployed people with disabilities to know deeper their perspectives and experiences on the problems they faced in employment issues. Interviews with university students with disabilities can give us broader insights on what they really needs in preparing them to involve in Industrial Revolution 4.0. The research proved that the preparation should be considered seriously and the right actions should be taken in order that people with disabilities can implement their roles in country development towards Industrial Revolution 4.0. Further analysis indicated that the role of NGOs and society in preparing people with disabilities with demanded soft skills and hard skills is crucial. For future research, it is recommended to explore more on what kinds of training and education should be given to people with disabilities to face the IR 4.0 with different approach.

KEYWORDS: People with Disabilities, Industrial Revolution 4.0, Policies, Actions

INTRODUCTION

National development is an effort to improve the quality of Indonesian people and people which is carried out on a sustainable basis based on national capabilities by utilizing advances in science and technology and taking into account the challenges of global development. In its implementation it refers to the nation's personality that is sovereign, independent, just, prosperous, advanced and has strong moral and ethical strength. The centralized and uneven development carried out so far turns out to only prioritize economic growth that is balanced with social, political, economic and democratic life and justice.

National development has the main objective of improving the welfare of all Indonesian people without exception, including persons with disabilities as one of the vulnerable groups. Vulnerability

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is a dynamic dimension of the process of poverty and poverty so it requires planned and integrated treatment. One form of handling vulnerability models is the provision of social protection. Social protection must be an investment and not just a transfer of costs, so social protection must be a model that can cause beneficiaries to be independent and independent in lifting themselves from the valley of poverty. Technology has now entered every space in human activity. The presence of technology seems inseparable from humans as users. Society is increasingly dependent on technology, because technology offers convenience and everything that is practical, instant, flexible, and efficient. Thus, the presence of technology indirectly also changes a person's social behavior in daily life (Fibrianto and Yuniar , 2019).

Persons with disabilities in Indonesia have the same rights and treatment as citizens. The regulations are in accordance with the mandate of Law No 2016 concerning Persons with Disabilities, Explained in Article 24 letter B, disability is guaranteed the right to express, communicate, and obtain information. This means that people with disabilities have the right to get information and communicative via easily accessible media.Based on Sakernas data (2017), the working-age population of national disabilities is 21,930,529 people. of that total, which included the workforce of 11,224,673 people or 51.18 percent. For the workforce with disabilities who work as many as 10,810,451 people or as much as 96.31 and open unemployment as many as 414,222 people or as much as 3.69 percent while those who are not in the workforce with disabilities are 10,705,856 people or 48.82 percent. Meanwhile, those who are in school are 206,163 people or 1.93 percent, managing 5,911,017 people or 55.21 percent and others 4,588,676 people or 42.86 percent.

Everyone has the right to get decent work regardless of differences in economic, social, cultural and political status, both the majority and the minority or marginal. Persons with disabilities are one of the minority groups in the community. Data from the World Health Organization (WHO), World Bank and International Labor Organization (ILO) in 2011 showed that the number of people with disabilities in the world is around fifteen percent or as much as one billion people from the total world population.

Protection of the right to obtain decent work for persons with disabilities in Indonesia has actually been regulated in Law No. 8 of 2016. However, in reality, access to employment options for persons with disabilities is still very limited. Until now there has been no clear sanction issued by the court or administrative sanctions imposed by the Ministry of Labor in connection with companies that do not allow persons with disabilities to work. Internal factors that are often encountered are psychological problems such as low self-esteem. Greenspan's statement quoted in Kauffman and Hallahan (2006: 11), said that people with disabilities care deeply about body image, acceptance from friends, freedom, self-acceptance and achievement. As a result, they are very angry with others and even themselves. While the external factors that cause the minimum number of workers with disabilities absorbed are negative stigma in the community. According to Macy (1996), this happens because people tend to bring up the stereotype that the physical limitations of persons with disabilities are

directly proportional to the level of intellectuality they have, they are still considered less educated and do not have work skills because of these limitations.

Fuller (2010: 1) states that there are three main obstacles related to opportunities for persons with disabilities, namely community prejudice, negative perceptions, and limited company funds in providing access for workers with disabilities. Moderate Hernandez, et. al., (2011) said that the lack of understanding of business actors regarding the potential and advantages of employing workers with disabilities raises doubts about business actors in making decisions to recruit workers with disabilities. One of their considerations is the productivity and profit aspects of the company. Businesses that employ people with disabilities are only seen as charity. Therefore, most workers with disabilities who work only hold positions as beginner and seasonal workers. (Poerwanti, 2017).

Job problems begin to come to the attention of persons with disabilities when they enter late adolescence or after completing high school level education. Persons with disabilities, especially those with low levels of education, have fewer abilities than individuals who do not have disabilities so that those with disabilities have difficulty competing with other individuals (Groce, 2003). In 2016, Law No. 8 of 2016 concerning persons with disabilities governing social rights for this group was passed. In the law, it is stated that every private company in Indonesia is required to employ one person with a disability every 100 workers, or 1 percent. Not only private, government agencies also have the same obligations. The Government, regional government, State-Owned Enterprises, and Regional-Owned Enterprises must employ at least 2 percent of persons with disabilities from all employees or workers. The sanctions were no joke. If violated, a criminal threat of a maximum of 6 months and / or a maximum fine of 200 million Rupiahs awaits. But unfortunately, this government regulation has not been implemented much.

Based on the description above, this study is intended to answer the question how the government of Indonesia stipulates a policy related to the rights of people with disabilities in facing the Industrial Revolution 4.0 and what actions have been taken in relevant to the policies set.

LITERATURE REVIEW

Definition of People with Disabilities

Disability is thus not just a health problem. It is a complex phenomenon, reflecting the interaction between features of a person's body and features of the society in which he or she lives. Overcoming the difficulties faced by people with disabilities requires interventions to remove environmental and social barriers. Disabilities are an umbrella term, covering impairments, activity limitations, and participation restrictions. Impairment is a problem in body function or structure; an activity

limitation is a difficulty encountered by an individual in executing a task or action; while a participation restriction is a problem experienced by an individual in involvement in life situations.[1]

"Disability" is a term of art with different specialized meanings, each developed for the particular policy or program that uses it. How we conceptualize disability shifts relative to the methodologies used to learn about it and the contexts in which it is addressed. The criteria for judging people to be disabled likewise fluctuate over time and across different social and cultural contexts.

The lack of attention to "disability" or "impairment" in general may have a simple explanation: there were no such concepts to attend to until 19th century scientific thinking put variations in human function and form into categories of abnormality and deviance. Once such categories were established, it became possible to talk, and generalize, about "the disabled," and philosophers have done so for various purposes (Hacking, 1990; Davis, 2002, Ch.4).

The definition of disability is highly contentious for several reasons. First, it is only in the past century that the term "disability" has been used to refer to a distinct class of people. istorically, "disability" has been used either as a synonym for "inability" or as a reference to legally imposed limitations on rights and powers. Indeed, as late as 2006, the Oxford English Dictionary recognized only these two senses of the term (Boorse, 2010). Defining "disability" solely in terms of social responses like stigmatization and exclusion does not distinguish disability from race or sex (Bickenbach, 1993).The challenge of distinguishing "disability" from other concepts, without taking a simplistic or reductive view of it, has been taken up by various specialized definitions. Many nondisabled people assume that people with disabilities won't make good partners and cannot or should not become parents (Safilios-Rothschild, 1970; Shakespeare, 1996; Asch and Fine, 1988; Wates, 1997). People with disabilities are perceived to be globally helpless based on their need for assistance with some facets of daily life (Wright, 1983).

The varied experiences of functioning with an impairment may have a more modest role to play in policy deliberations than the common experiences of stigma and discrimination. But that role is still an important one. In designing buildings, transit systems, and other public and private facilities, and in establishing norms of conduct in schools and workplaces, we need to know a lot about how people with atypical functions get around and get along. It is not enough to ensure that the width of a doorway exceeds the width of a standard wheelchair; it is also important to find out about the preferences of wheelchair mobilizers before and after they enter a building. This kind of information is no different from that routinely elicited from nondisabled people in

[1] https://www.who.int/topics/disabilities/en/

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designing facilities. But it requires the representation of people with a wide array of impairments, and it requires respectful attention to the minutiae of their daily lives.[2]

Government Policies

The Government of Indonesia has adopted a number of laws, policies, standards and initiatives related to PwDs. However, many articles of the legislation are still charity-based. The following are the main laws and regulations:

1. Law No. 4/1997 concerns Persons with Disabilities and Government Regulation 43/1998 concerning Efforts to Improve Social Welfare of Persons with Disabilities (1997/1998): Specifically regulates people with disabilities. Article 14 stipulates a 1 percent quota for the employment of persons with disabilities in government and private companies. Article 5 states that "every person with a disability has equal rights and opportunities in all aspects of life". Article 6 lists various rights for persons with disabilities such as education, employment, equal treatment, accessibility, rehabilitation.
2. Law No. 39/1999 concerning Human Rights (1999): Article 41 (2) states that every person with a disability has the right to special facilitation and treatment.
3. Law No. 25/2009 on Public Services (2009): Article 29 states that public service providers must provide special services to persons with disabilities in accordance with regulations.
4. Law No.28 / 2002 on Building Construction (2002) clearly stipulates that facilities must be accessible for persons with disabilities. Article 27 states that facilities must be easy, safe and pleasant, especially for persons with disabilities.
5. Minister of Manpower and Transmigration Regulation No. KEP-205 / MEN / 1999 : Article 7 states that persons with disabilities are entitled to vocational training certificates.
6. Circular of the Minister of Manpower and Transmigration No. 01.KP.01.15.2002 concerning the distribution of workers with disabilities in the private sector.

Meanwhile, the ILO Convention on Discrimination in Employment and Occupation, 1958, (No. 111) states that:

1. The status of the convention was ratified on 7 June 1999. Worldwide, work discrimination prevents many people with disabilities. Convention No. 111 on discrimination is one of the main ILO conventions.
2. ILO Convention on Vocational Rehabilitation and Work (Persons with Disabilities), 1983, (No. 159). Status: not yet ratified. Calls for special attention to be paid to efforts to promote vocational rehabilitation and employment services for persons with disabilities in rural areas and remote communities. The recommendations that follow (No. 168) emphasize the importance of full opportunities for communities to participate in the planning and implementation of similar services.

[2] Stanford Encyclopedia of Philosophy, Disability: Definitions, Models, Experience (2011)

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3. Law No. 39 of 1999 concerning Human Rights, persons with disabilities / disabilities are vulnerable groups of people who are entitled to more treatment and protection with regard to their specificity.
4. The International Convention on the Rights of Persons with Disabilities and Optional Protocols to the Convention (UN Resolution 61/106 December 13, 2006), defines that a person with a disability is anyone who is unable to guarantee himself, all or part, normal individual needs and / or social life, as a result of their disability, whether innate or not, in terms of their physical or mental abilities.
5. United Nations Convention on the Rights of Persons with Disabilities (2006) and Optional Protocol. Status: ratified 30 November 2011. The Optional Protocol has not yet been signed. Article 27 concerning Work and Employment: Concerns with the rights of persons with disabilities in work and employment, and highlights the right to opportunities to live a life of work freely chosen or accepted in the labor market and an open, inclusive and accessible work environment for persons people with disabilities.
6. Convention on the Rights of Persons with Disabilities (CRPD), precisely in 2007. But it was only ratified and regulated in national regulations in 2011, namely through the ratification of Law No. 19 of 2011 concerning Ratification of the Convention on the Rights of Persons with Disabilities.

Indonesia is one of the countries that signed the Convention on the Rights of Persons with Disabilities (CRPD), precisely in 2007. But it was only ratified and regulated in national regulations in 2011, namely through the enactment of Law No. 19 of 2011 concerning Ratification of the Convention on the Rights of Persons with Disabilities Convention on the Rights of Persons with Disabilities). Many factors have caused the ratification to be hampered, one of which is the weak political will of the legislators who did not put disability issues as a priority.

The promulgation of Law No. 19 of 2011 has an impact on the emergence of public pressure in various regions for the Government or regional government to immediately implement the CRPD ratification law. Nationally, the urge to revise or update Law No. 4 of 1997 concerning placements with Disabilities in the company continues to emerge. The change is very urgent to do, especially in terms of philosophical, sociological, juridical, and political.

In the Law of the Republic of Indonesia Number 4 of 1997 Concerning Persons with Disabilities, Article 14 states that, the Company must employ at least 1 (one) person with a disability that meets the requirements and qualifications of the work concerned, for every 100 (one hundred) people the employee. In the current context Law No. 4 of 1997 has been unable to accommodate the increasingly complex problems of persons with disabilities especially in recent years because it is related to the readiness of persons with disabilities in Indonesia in the face of the Industrial Revolution 4.0.

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People with Disabilities in Industrial Revolution 4.0

The fourth industrial revolution indicates an increase in quality of industrial production by combining machines, products, and people. This is done by forming a new production system, which enables a more targeted and faster information exchange. By doing so, it moves towards a future, in which a collaboration of robots and people takes place together with the support of intelligent assistive systems and web technology during the performance of the work activities (Gorecky, D.; Schmitt, M.; Loskyll, M.; Zühlke, D. (2014).

The industry 4.0 is a word creation based on (industry 1.0), mass production (industry 2.0) and automation (industry 3.0). Industry 4.0 describes the digital networking of all people, machines, processes and systems involved in the production and value chain, and also as a fourth industrial revolution. (Perry, C., Duden Wirtschaft, 2016). Following the industry 4.0 paradigm, all objects of the factory world are equipped with integrated computing power and communication capability. This is by no means only about machine-to-machine (M2M) communication, but will also have far-reaching implications for the interaction between man and technology. From automation to networking, that's an important aspect of Industry 4.0. A large number of technical concepts and applications are already being marketed under the term Industry 4.0. The characteristics elements for this were taken from Prof. Dr. Five central fields (ESCH, 2015):

(a) The automation, by which increasingly data-driven decisions are made on the basis of big-data analyzes.
(b) The standardization through which uniform communication standards and interface standards for data processing are created.
(c) The embedding of sensors as components of physical actors, which lead to a fusion of hardware and software.
(d) Digitization, with which information can be recorded and processed, thus enabling the creation of a digital image of the goods flow.
(e) The networking between man and machine as a central component along the value chain.

Companies realize that not only economical aspects affect the productivity within the production environment but also the human centered ones (Matt, D.T.; Rauch, E., 2013).The research linked to human workers within Industry 4.0 goes towards the application of digital information (Dean, et.al., 2009) and assistive systems (Lall, M. et.al., 2017) as solutions for the worker in order to better handled the increasing complexity that goes together with the production systems of the future (Andersen, R. et.al., 2018). Worker assistance systems have been classified as one out of five main branches of research related to Industry 4.0 (Prinz, C.,et.al., (2017).

From the explanation above, it can be concluded that enterprises need employees with technical knowledge, so that this aspect gets more and more important, so that deficits like physical handicaps or not enough cultural knowledge lose on meaning. This fact is also valid for the entrepreneurship of

disadvantaged persons. For them industry 4.0 offers more possibilities to create their own business. Today, the technological possibilities (machine/devices) are understood as a 'partner' that improves and supports the capabilities, knowledge, and competences of the human. Industry 4.0 and the development of new and advanced assistance systems also offer new possibilities and potentials for a better inclusion of employees with disabilities.[3]

The World Economic Forum, in July 2018, published several changes that would be caused by the 4.0 industrial revolution, namely automation. Automation is a change in various aspects of life, especially in the production process. And in the completion of various tasks and activities that are generally carried out by humans will be replaced by machines. During the industrial revolution there will be major changes in various fields, such as the development of artificial intelligence, the internet of things, and even the creation of self-driving vehicles. These things are feared will replace human labor. The 4.0 industrial revolution made it possible for humans to develop their capacities in accordance with technological developments, so that humans could utilize various existing technologies to facilitate work. In addition, various generic skills are needed so that humans can continue to work in various fields without competing with machines. It is hoped that humans can develop their various potentials and do various kinds of work that cannot be done by machines, such as: (a). Negotiation, (b). Cognitive Flexibility, (c). Service Orientation, (d). Judgement and Decision Making, (e). Emotional Intelligence, (f). Coordinating with others, (g). People Management, (h). Creativity, (i). Critical Thinking, (j). Complex Problem Solving.

In the World Economic Forum, it is projected that there will be several sectors that will develop in 2020, such as technology and computational thinking, caregiving, social intelligence and new media literacy, and others. various sectors require certain soft skills as above. These abilities are not only found in vocational schools or universities. But it can be sharpened by practice and experience.[4] Figure 1 shows the two elements of an Industry 4.0 working environment, which are: 1) Industry 4.0 Enablers - Comprises of Nine (9) Technology Pillars of Industry 4.0 and Six (6) Industry 4.0 design principles, 2) Ten (10) Industry 4.0 Generic Skills**.**

[3] Inclusion of Workers with Disabilities in Production 4.0: Legal Foundations in Europe and Potentials Through Worker Assistance Systems (Mark, et.al.,2019).

[4] https://forbil.org/id/article/177/8-softskill-utama-yang-dibutuhkan-untuk-bersaing-di-masa-revolusi-industri-40

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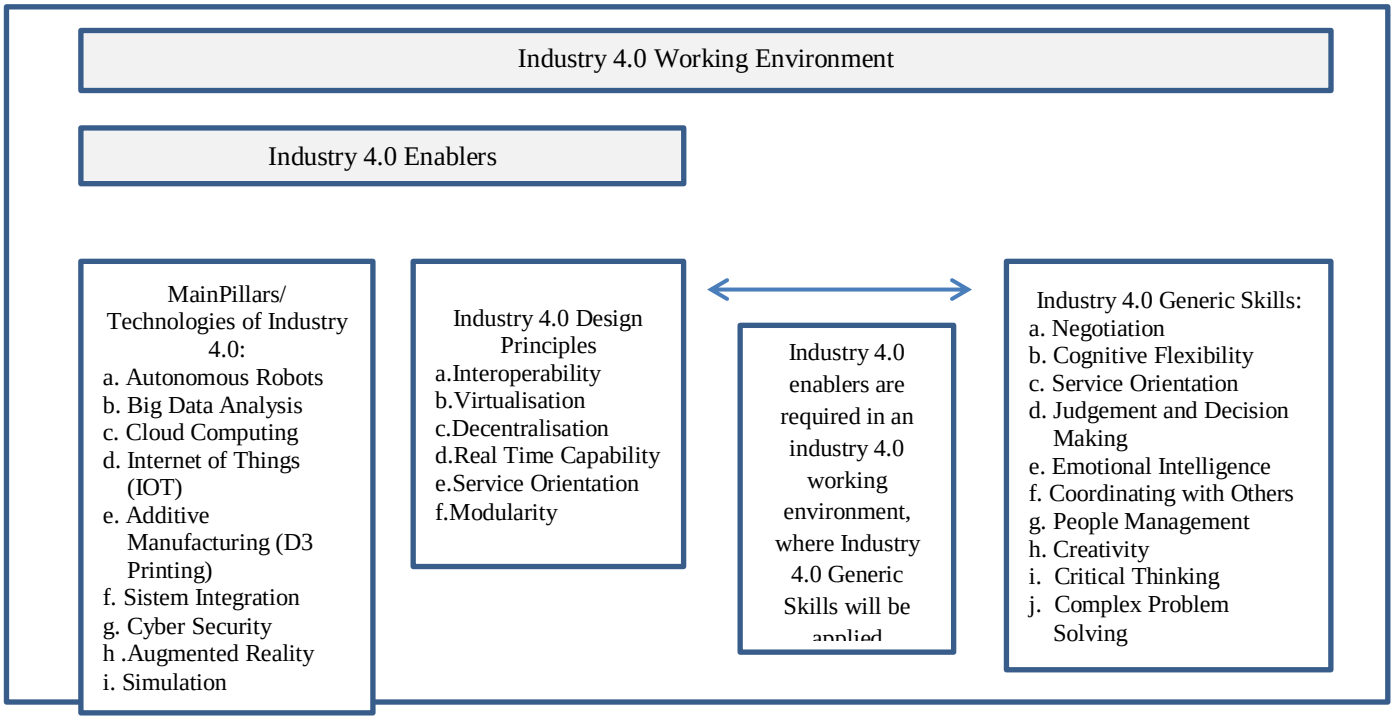
Figure 1
Elements of an Industry 4.0 working environment



Source: World Economic Forum (2018)

RESEARCH METHODS

The types of data required in this study consist of primary data and secondary data. The primary data were collected from the semi structured interviews because it can direct the interview more closely, to have a pre-determined set of questions while simultaneously allowing the interviewees sufficient flexibility to shape the flow of information given (Wilkinson and Birmingham, 2003). Robson (2002) also says that it is appropriate to use the interview when the individual perceptions of processes within a social unit are to be studied and the interviewer can ask more questions, if the answer does not come up to expectations. For the secondary data, the documentation techniques were applied.

A phenomenological approach is employed in this research. Phenomenology is an approach to qualitative research that focuses on the commonality of a lived experience within a particular group. The fundamental goal of the approach is to arrive at a description of the nature of the particular phenomenon (Creswell, 2013). According to Creswell (2007), a phenomenological study "describes the meaning for several individuals of their lived experiences of a concept or a phenomenon" (p. 57). When the research problem is to understand the common experiences of several individuals about a phenomenon, a phenomenological study is appropriate.

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Therefore, this study uses a phenomenological approach since it explores the experiences of the participants.

Data analysis technique used in this research is qualitative analysis technique. The process of data analysis begins by reviewing all data that has been obtained from various sources. Then data reduction was done by making the abstraction. The next step is to organize the data in units. The units were then categorized in the next step. Categorization was done while making coding. The last stage was to check the validity of the data. After this stage was completed, then interpretation of data was done, so that the stages in qualitative data analysis include: data unit processing, data reduction, categorization of data including checking the validity of data, and interpretation of data (Moleong, 2008).

The participants for in depth interview consists of 15 people namely 5 employed individuals with physical disabilities, 5 unemployed individuals with different disabilities (2 visual impaired and 3 physical disabilities), 4 university students with physical disabilities to get their perspectives on what actions should be applied by them to prepare themselves to participate in the IR 4.0 and what policies should be taken by the government and related stakeholders. Finally, an official of the Ministry of Research, Technology and Higher Education was interviewed to get the perspectives on the strategy of the government to prepare people with disabilities to participate in the IR 4.0.

RESEARCH FINDINGS AND DISCUSSION

From the interviews with 5 persons with disabilities who have graduated from vocational schools and have worked, data is obtained that before working in the formal sector, they have been prepared with various skills needed at this time. They are also given a curriculum that can help high school / vocational students to deal with the industrial revolution 4.0, especially those related to the development of soft skills that have not been widely taught in other formal schools.

In order to face the 4.0 industrial revolution that is currently underway, there are a number of basic competencies that Indonesian young people must have prepared. Aside from being hard skills that have been widely taught in schools, they also need soft skills that will help the process of social interaction in all skills. When in SMK, they get soft skills material such as creativity, critical thinking, problem solving and decision making, management, and emotional intelligence. This is consistent with what was stated in the World Economic Forum (2018), regarding the ability or soft skills that need to be possessed by everyone today, including the ability to solve problems, critical thinking, collaboration and coordination, communication, and good cognitive abilities.

> “Vocational schools have changed a lot now compared to a few years ago. It's more oriented to the link and match so that graduates can be accepted to work in companies or start independent businesses. Likewise, his attention on students with disabilities is much better so that people with disabilities can get the same opportunities. "

Soft skills, also known as transverse skills, are qualities needed in all fields of work. This ability includes creativity, imagination, intuition, emotions, and ethics that are very useful in building social interaction.

The researcher also interviewed people with disabilities who have not found jobs to get a more comprehensive picture. From interviews with persons with disabilities who have not worked, data is obtained that to date they have never heard of any socialization related to training or the provision of skills to prepare to work independently or run a business. The five persons with disabilities have graduated from Special Schools for type A (visual impaired) and type D (physical disabilities). When they graduated from Special School, they did not go to college because they intended to be able to work right away. That is why they tend to register to take courses in order to have the skills needed in the world of work.

> "It turned out that not all courses accept disabilities like us, especially for people with visual impairments on the grounds that there are no braille capitals and if you practice later you will have difficulty using equipment. In fact, to be able to do the work, the most important thing is not the theoretical module but rather the awareness of training institutions that provides more opportunities for people with disabilities to practice. Course owners and their management must also have the awareness to be more able to accept persons with disabilities and treat them without discrimination. "

This is certainly not in line with Law No. 13 of 2003 concerning manpower which states clearly that persons with disabilities will have the same position without discrimination to obtain employment. From the above data it is known that until now, there are still many educational and training institutions that have not carried out the mandate of the Minister of Manpower and Transmigration Regulation No. KEP-205 / MEN / 1999 which Article 7 mentions that persons with disabilities are titled to vocational training certificates. Another difficulty experienced by persons with disabilities who have not received employment opportunities is also when they have sufficient skills. The entrepreneurs have not fully welcomed their presence. This is not in line with what is stated in the Circular of the Minister of Manpower and Transmigration No. 01.KP.01.15.2002 concerning the distribution of workers with disabilities in the private sector.

When asked what they would do to live independently, the five persons with disabilities said that they tend to start a business and not work for others. They will also recruit fellow employees with disabilities so that the data provides wider opportunities to work.

From interviews with 4 university students with disabilities, data obtained that currently there are still many universities that have not provided soft skills to students in preparation for facing the industrial revolution 4.0. Of the 4 students interviewed, only one person said that the university

where he studied had made curriculum adjustments in order to prepare his students including students with disabilities.

> "In this new curriculum, a special module has been prepared in which students are given soft skills material which is very much needed in today's digital era. We are also taught negotiation techniques, problem solving and decision making, critical thinking and creative thinking, motivation, self concept, and emotional intelligence

The material provided was in accordance with what was stated in the World Economic Forum (2018). But unfortunately, there are still many universities that have not included these materials in their curriculum, and rather direct them as a choice in non-academic activities.

Meanwhile, interviews with officials from the Ministry of Higher Education and Higher Education, obtained data that in order to be able to prepare students with disabilities to actively participate in the era of the industrial revolution 4.0, it cannot rely solely on the role of the government. The role of the community, especially families of persons with disabilities, is very large in developing the potential of persons with disabilities because usually the challenges faced are those from the immediate family of the person with disability who feel ashamed of the shortcomings suffered by family members, so that the potential exists of the person with disability ultimately it cannot be used as the development of a more independent life preparation in the economic field.

Indeed, it cannot be denied that jobs will be lost as the industrial revolutions 4.0 develop. There are as many as 57 percent of the current work will be eroded by robots. However, behind the loss of some jobs will also appear some new jobs. In fact, the number is predicated as many as 65,000 jobs. Interestingly, more than half of these skills are soft skills. That is, soft skills become one of the most important factors for workers to have in the future, such as the ability to communicate and cooperate with others, solve problems and other aspects of emotional intelligence as the statement express by Matt D.T and Rauch. E (2003) :

> "We believe and we train these children to be critical without having to offend others. We also treat them as intelligent individuals who can continue to learn and adapt. From there we need to instill the values of education needed today, and changes in behavior can occur because they will naturally choose. What we practice is soft skills that are indeed needed by the industry today, according to the various inputs we receive in various discussion forums with industry parties. In general, the industry emphasizes the need for employees who can continue to learn and adapt quickly and be literate in digital technology and information."

CONCLUSION

From the above data analysis, it can be concluded that there are still a lot of universities which haven't made the curriculum adjustment in order to prepare his students including students with disabilities. Those include among others negotiation technique, problem solving and decision

making, critical thinking and creative thinking, motivation, self concept, and emotional intelligence. However, in vocational schools, students have been prepared with various skills needed at this time. They are also given a curriculum that can help high school / vocational students to deal with the industrial revolution 4.0, especially those related to the development of soft skills that have not been widely taught in other formal schools. For future research, the researcher recommends to conduct a study on the module for preparing university students to face the Industrial Revolution 4.0 with different approach.

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