Peer Reviewed – International Journal

Vol-5, Issue-4, 2021 (IJEBAR)

E-ISSN: 2614-1280 P-ISSN 2622-4771

https://jurnal.stie-aas.ac.id/index.php/IJEBAR

CREATIVE INDUSTRY HUMAN RESOURCES IN THE LEGAL FIELD TO THE INDUSTRIAL REVOLUTION 4.0

Aryono¹, Indah Maulani², Rina Arum Prastyanti³

Universitas Duta Bangsa Surakarta^{1,2,3} E-mail: rina arum@udb.ac.id

Abstract:

The technological revolution is now entering the fourth wave called the industrial revolution 4.0. Industry 4.0 is a technological revolution that gave birth to digital technology. The business world is undergoing a major transformation where most of the production processes shift from conventional technology to digital technology. Industry 4.0 transformation also provides benefits for industrial companies by increasing efficiency, improving machine and equipment performance, increasing the speed of production operations and product quality. The acceleration of digital transformation is a must to improve the manufacturing industry sector. Efforts to accelerate the transformation of industry 4.0 are to increase awareness and assist the industry in transforming. The formulation of the problem in this study is (1) how to develop Human Resources for innovation, in order to achieve organizational performance to meet the Industrial Revolution 4.0 in the legal field? (2) How has the acceleration of digital transformation become imperative to improve the manufacturing industry sector? The method research used is normative and descriptive.

Keywords: *Human Resources, Industrial Revolution 4.0, Technology*

1. Preliminary

The Industrial Revolution 4.0 is a transformation effort towards improvement by integrating the online world and production lines in industry, where all production processes run with the internet as the main support. What are the driving factors that must be strengthened to welcome Industry 4.0 in Indonesia, some of which are to improve automation, machine-to-machine communication, human-to-machine communication, AI, and continuous technology development, to implement, there are four basic driving factors. The first is the increase in data volume, computing power, and connectivity. There should also be an increase in analytical and business intelligence capabilities in this Industry. New forms of human-machine interaction, such as touch interfaces and augmented-reality systems are also important. Not to forget, the development of the transfer of digital instructions into physical form, such as robotics and 3D printing, preparation of industrial human resources through vocational education that leads to high skills and improving the skills of industrial human resources that are dominant low/middle to high skill levels have also been carried out.

2. Research methods

The approach method used in this study is a combination approach, which is a study using instruments for measurement, data collection techniques, using tests, questionnaires and

Peer Reviewed – International Journal

Vol-5, Issue-4, 2021 (IJEBAR)

E-ISSN: 2614-1280 P-ISSN 2622-4771

https://jurnal.stie-aas.ac.id/index.php/IJEBAR

combined (triangulation) techniques, data analysis is deductive (quantitative) and inductive (qualitative).

The type of research design used is descriptive design, which is research conducted to answer questions about who, what, when, where and how it relates to certain research. Descriptive research is used to obtain information about the status of the variable phenomenon or the condition of the situation in the field.

The research specification used is descriptive analytical, which describes the data obtained from observations, interviews, documents and field notes, then analyzed in the form of a journal to describe the problem with the chosen title, namely Human Resources for Creative Industries in the Field of Law Against the Industrial Revolution. 4.0.

The element of this research which is the independent variable (Independent). The independent variable or independent variable is a variable that affects the dependent variable or dependent variable. In this case, the independent variable is the Industrial Revolution 4.0 which can affect the development of human resources, as the dependent variable.

This study uses primary data and secondary data. The main data in this study is primary data. Primary data is obtained by researchers directly (from the first hand), while secondary data is data obtained by researchers from existing sources. The primary data in this study were collected through an online questionnaire using a google form, while the secondary data was obtained from a literature study.

The data used in this study were obtained from: field studies and literature studies. The field study was obtained through an online questionnaire using a google form which was distributed to all Human Resources involved in a company or industry. While the literature study was obtained from the development of Human Resources in industry 4.0.

The sampling method of this research is random sampling, namely the technique of taking samples from members of the population at random without regard to the existing strata in the population. The sample is human resources in a company or industry, with a target population of over 30 people.

The data analysis technique in this study used qualitative analysis techniques. Qualitative data analysis is a technique of describing research data that intends to understand the phenomena of what is experienced by research subjects such as behavior, perceptions, motivations, actions, etc. holistically, and by means of descriptions in the form of words and language, at a time. special contexts that are natural and by utilizing various natural methods. This technique is used to find out.

The results of this research are packaged in the form of reference books, journals and copyright for publication.

3. Results and Discussion

3.1. Results

The industrial revolution 4.0 is a generation of technological development that began with significant changes in the way humans work, especially in the industrial world. In this era, almost every scope of human workspace is equipped with machine technology. This change in general makes every human job easier. But on the other hand, the development of the industrial revolution 4.0 requires that existing human resources are required to continue to develop their abilities and expertise in the face of rapid global industrial competition.

Peer Reviewed – International Journal

Vol-5, Issue-4, 2021 (IJEBAR)

E-ISSN: 2614-1280 P-ISSN 2622-4771

https://jurnal.stie-aas.ac.id/index.php/IJEBAR

The Industrial Revolution 4.0 not only has extraordinary potential in overhauling industry, but also can change various aspects of human life, therefore how to develop Human Resources for innovation, in order to achieve organizational performance to welcome the Industrial Revolution and how to accelerate digital transformation is a must to improve manufacturing industry sector.

3.2. Discussion

In today's dynamic and competitive era, companies are faced with tough challenges by meeting the growing needs and expectations of the market and customers. To ensure competitiveness and success, organizational managers need to accept innovation as a key element of the organization. However, the main driver of innovation is human resources and to be successful it is necessary to support, plan and maintain a culture of innovation. Based on these aspects, the author proposes a human resource development framework for innovation, in order to achieve organizational performance to meet the Industrial Revolution 4.0. The purpose of this framework is to offer, to all managers, a clear picture of the existing capacity of human resources to innovate and the possibility to develop this capacity in order to increase the organization's capacity for innovation,

The world is undergoing rapid changes known as the Industrial Revolution 4.0. What is meant by this revolution is a change in the production process which is characterized by, among others, the use of the internet, robots, automation to the use of artificial intelligence (Cahyono, 2018). In a very fast change then the role of society, government organizations and others are also changing rapidly. They are required to change in order to adapt and survive the pressures of life (Bailey et al, 2018).

In order to answer the challenges of globalization and be able to compete on a global scale, we have no choice but to develop quality and effective Human Resources (PSDM). They must be intelligent, competent, possess HR management skills, have the ability and willingness to learn and lead a learning organization, and be able to create human resources and collaborate with others on the same basis, rather than acting like something for them (Ozkeser, 2019).

HR development is the process of developing and issuing professional capabilities for the purpose of improving performance through organizational development and training and personnel development (Holton, 2002). HRD is based on the belief that organizations are man-made entities that rely on human expertise to set and achieve their goals and HR professionals are advocates of individuals and groups, work processes and organizational integrity. Some HRD models define a set of practices that, if pursued, will most likely contribute to human, capital accumulation through which an organization can build its competitive advantage (DeGeus, 1997; Currie, 1998; Willis, 1997).

The HRD function is different from the personnel function. Rao (2007) outlines the following roles of a HR manager:

- a. Develop enabling capabilities in individuals and systems.
- b. Integrating people development with organizational development.
- c. Maximizing individual learning opportunities within the organization through various mechanisms, autonomy and responsibility.
- d. Decentralization, delegation and shared responsibility.
- e. Balancing change and adaptation.

Peer Reviewed – International Journal

Vol-5, Issue-4, 2021 (IJEBAR)

E-ISSN: 2614-1280 P-ISSN 2622-4771

https://jurnal.stie-aas.ac.id/index.php/IJEBAR

f. Establish feedback and reinforcement mechanisms, etc.

Globalization and technological advances encourage organizations to develop new strategic directions. Therefore, employees should be ready to accept new roles and should think about employability rather than job security. There is increasing research-based evidence showing that employees, particularly knowledge workers, do not consider money as the only important reason to work for companies (Kleiner et al, 2011). Instead, they now expect a richer organizational environment and the alignment of their individual values with organizational values (Hasan, 2007). When employees recognize the difference between the ideal and operational values of the organization and if the gap is too wide it will erode their trust and commitment, especially affective commitment (Connel et al, 2002).

Organizational values serve many purposes. It sets the tone of the environment, binds people together, facilitates work behavior and the achievement of common goals. It also represents the ambition that people hold for the organization as a living system because values determine who and what each person as a human being offers to the whole company (Assem, 2019).

There is sufficient evidence to suggest that organizations need to promote values like openness, trust, initiative, teamwork and collaboration, humane treatment of workers, creativity, quality, empowerment, delegation etc. for better results (Dastmalchian, 2006). According to research by Kotter and Heskett (In Sullivan et al, 2002), value-oriented companies are superior to other companies, the increase in turnover is four times faster. Job creation was seven times greater, stock prices rose 12 times faster; profit performance increased by 750%. Siniawer (2014), found that organizations experience significantly lower employee turnover when they value respect and teamwork.

Human resource development can be analogized as a process of increasing one's abilities, skills and knowledge. From an economic point of view, this can be said to be the accumulation of human capital and its effective investment in economic development (Figurska & Matuska, (2013). HR plays an important role in driving innovation. It is no secret that business success today revolves mostly around people, not capital (Agarwala, 2003).

Innovation is important in two main ways for organizations, playing a role in radical development and smaller sustainable change. As organizations seek to become more innovative, their employees' behavior must also change (Wang et al, 2005).

For innovation to take place, companies can leverage human capital to develop organizational expertise to create new products and services (Singh, 2018). The field of innovation in human resource development has no boundaries. There are three categories of innovation fields (Bailey et al, 2018).

In the first category, human resource management for innovation includes all the elements of constantly searching for needed personnel, suitable personnel, and finding suitable positions. This is a challenging activity that requires careful and careful planning, education and training. This includes the challenge of recruiting, educating and training high-quality management and leadership personnel at strategic and operational levels. The knowledge and skills of these people are critical to leading and managing large and complex organizations that span multiple departments.

Second, innovation in technology is indispensable for strategic human resource development and capacity building, but by providing the necessary financial resources to

Peer Reviewed - International Journal

Vol-5, Issue-4, 2021 (IJEBAR)

E-ISSN: 2614-1280 P-ISSN 2622-4771

https://jurnal.stie-aas.ac.id/index.php/IJEBAR

provide funding and support for this technological innovation can be made possible. Without the financial support needed, innovation will only run in place.

The third type of innovation is a combination of the first two fields and is complementary between the three.

Proposed Framework for HR Development for Innovation

The economic environment is changing rapidly, this change is marked by globalization, changing customer and investor needs, and increasing product market competition. The actors who create HR organizations are considered the most important assets of a company. Recognizing that the basis of competitive advantage has changed, it is important to develop different terms of reference to consider issues of human resource management and strategy (Cania, 2014).

The knowledge embedded in human capital enables companies to enhance specific competencies and discover innovation opportunities. When organizations or companies create new products and develop management processes, they need motivation and human resources to create ideas, develop innovative methods and seize new opportunities. The human resource management function can influence and modify employee attitudes, capacities and behaviors to achieve organizational goals and play an important role in maintaining the necessary conditions to catalyze and channel individuals towards the development of innovation activities (Singh, 2018).

When companies use creative abilities and innovative characteristics as recruitment and selection criteria, their employees tend to generate a diversity of ideas and commit to more innovation behaviors. Through effective staffing, employees become an important source of new ideas in the company's innovative processes. A high level of participation will create conditions that encourage employees to bring new ideas and exchange knowledge in the ongoing innovation process and, in turn, increase innovative results (Singh, 2018).

In order to achieve actual organizational performance, the authors of this paper propose a HR development framework for innovation, to achieve actual organizational performance. The aim of this framework is to offer, to all managers, a clear picture of the existing capacity of HR to innovate and the possibility to develop this capacity in order to increase the capacity of organizations for innovation, thereby increasing their chances of success in a highly dynamic and competitive era. at the moment.

Innovating through HRD begins at the HR selection step, where it is necessary to identify people with great innovation abilities. It is important in organizations to have people who can "think outside the box" so that the organization can benefit from innovation. To recruit people for innovation, it is necessary to see if they want to know if they are locked in one point of view or willing to consider others, if they are open to new ideas, new concepts, knowing this can help also in planning how their skills are enhancement. The hunger to always learn, openness, and always think of things in different ways, needs to be present in innovative people.

For innovation to be successful, managers need to support, plan, and nurture a culture of innovation. The ability to build, maintain and create organizational culture is an important role of the human resources department. The most powerful force in business is culture. While corporate culture is not necessarily the responsibility of HR leaders, the people who are hired and the training and cultural imperative placed on the business is done through HR roles, so HR leaders can have a major impact on the organization or not. culturally aligned

Peer Reviewed - International Journal

Vol-5, Issue-4, 2021 (IJEBAR)

E-ISSN: 2614-1280 P-ISSN 2622-4771

https://jurnal.stie-aas.ac.id/index.php/IJEBAR

with innovation. Creating an innovative culture is a very complex process that needs to be carried out from the top to the bottom of the organization. The process of creating an innovative culture will not be described in detail in this article.

Another important aspect of HR development for innovation is the reward system. The right reward system provides strong power to strengthen commitment, direct employee professional growth, and shape the company's culture to be more innovative. The HR department should look at existing reward mechanisms and ask if they are doing the right thing to develop employees and organizational culture. This should include compensation strategies, performance management tools, and other targeted recognition and reward programs.

The key element for organizations in successful innovation, through human resource development, lies in how learning systems are created. Managers must ask, "what employees need to do in order for the business to get what it needs", and then help employees to achieve that behavior. This could mean the choice to increase self-awareness, for a deeper understanding of the context, to appreciate the relationship between their own new behavior, business outcomes and personal implications, picking up some skills to achieve this behavior change, using support systems such as coworkers, exercises, mentoring, etc. The goal is determined and so is the goal, they will create a path for themselves.

The performance system must provide excellent performance and can serve as a strong driving force to grow and promote talent within a company. One of the main problems of corporate management is, and they waste a lot of money, effort and time in recruiting and training, educating and hiring talented people and then losing them. Prone to mismanagement and carelessness. This is the most basic error and tends to be considered management stupidity. Granted, we can't keep everyone, but keeping in the organization, motivating and promoting talent is a challenge, and challenges are often the most rewarding for them (Bailey et al, 2018).

The application of industry 4.0 is an opportunity to revitalize the manufacturing sector in the country to be more efficient and produce quality products. Acceleration of digital transformation is a necessity that must be done. For countries that are competitive and able to keep up with changes in digitalization, it will usually be easier to develop in domestic and international markets. On the other hand, countries with slow digital transformation will find it difficult to dominate the market.

Technology that is used properly will be able to support efficiency in terms of financing. In addition, the transformation of industry 4.0 which uses technology more will also change the way of doing business, and even new jobs will also appear, the impact on the transformation of industry 4.0 on increasing productivity, production process efficiency, and export performance of industrial companies, as well as companies continuing to operate by complying with health protocols during the COVID-19 pandemic which is of course supported by the application of industrial technology 4.0.

One of the strategic efforts to support the acceleration of industry 4.0 adoption is to encourage companies that excel in their sectors and are ready to apply Industry 4.0 technology to be designated as National Lighthouse 4.0. The determination of the company to become an industrial 4.0 lighthouse is expected to be an example for other manufacturing industry sectors to be able to take positive benefits from the application of industry 4.0. "A

Peer Reviewed – International Journal

Vol-5, Issue-4, 2021 (IJEBAR)

E-ISSN: 2614-1280 P-ISSN 2622-4771

https://jurnal.stie-aas.ac.id/index.php/IJEBAR

lighthouse will be a role model as well as a government dialogue partner in the implementation of industry 4.0 in Indonesia.

In 2020, three companies have been designated as National Lighthouse Industry 4.0, namely PT. Pupuk Kalimantan Timur, PT. Indolakto – Purwosari, and PT. Akebono Brake Astra Indonesia. These three industrial companies have demonstrated measurable financial and operational benefits from the implementation of industry 4.0. These benefits include increased productivity (such as employee productivity and production processes), increased work efficiency, reduced energy use, reduced operational costs (such as production costs, maintenance, rework, and scrap), and improved quality.

4. Conclusion

The importance of innovation in business today is widely recognized by all managers. At the HR level they talk about innovation; they support innovation, but they usually kill the innovation offered by employees and managers. HR is always on the lookout for problems arising from implementing new procedures or processes throughout the company.

In an era of competitive and rapid change innovation and human resource management are playing an increasingly important role in maintaining the "leading" competitiveness of an organization. "Discontinuous change requires discontinuous thinking. If the new way is going to be different from the old, not just an improvement, then we need to see things in a new way.

It is important to realize why success through human resources can be sustained and cannot be directly imitated by competitors. The reason is that the success that comes from managing people effectively is often not as visible or transparent as the source.

Reference

Based on research conducted by the author, the authors take several sources of reading, among others, as follows.

Agustina Tri Siwi, 2019, Entrepreneurship in the Industrial Revolution 4.0 Era, Jakarta, Mitra Discourse Media.

Morissan, 2012, Survey Research Methods, Jakarta: Kencana Prenada Media Group

Saleh, Baso, 2016. Use of Information Technology Among Micro and Small Business Actors and Middle School in Border Areas (Study in Belu Regency, Nusa Tenggara Province) East), Community Community Journal. Vol I (1), 141-152

Sugiyono, 2013, Quantitative, Qualitative and R&D Research Methodology, Bandung, Alfabeta.

Wirosuhardjo, Kartomo (1986), Population and Employment Policy in Indonesia, Faculty of Economics, University of Indonesia Jakarta.

Yani, Gunawan Widjaja Ahmad, 2003. Law on Consumer Protection, Jakarta, PT. Main Library Gramedia.

Ambar, Teguh and Rosidah, 2003, Human Resource Management, Yogyakarta, Graha Ilmu As'ad, Moh, 2004, Industrial Psychology, General Series on Human Resources, Yogyakarta, Liberty.

Arikunto, Suharsimi, 2010, Research Procedures of a Practical Approach, Jakarta, Rineka, Create.

Peer Reviewed – International Journal

Vol-5, Issue-4, 2021 (IJEBAR)

E-ISSN: 2614-1280 P-ISSN 2622-4771

https://jurnal.stie-aas.ac.id/index.php/IJEBAR

- Salim HS and Erlies Septiana Nurbani, Application of Legal Theory in Thesis Research and *Dissertation*, Jakarta: PT. Raja Grafindo Persada, 2013, p. 301
- Maria Mousmauti, "The Effectiveness test as a Tool for Law Reform". IALS Sudent Law Reviews, Vol. 2 Issues. 1, Autumn 2014, Special Issues, 4
- Lawrence M. Friedman, Legal System A Social Science Perspective (A legal Siatem A Social Science *perspective*), translated by M. Khozim, Bandung: Nusa Media, 2009, pp. 7-9
- Soerjono Soekanto, Factors Affecting Law Enforcement, Jakarta: PT. King Grafindo Persada, 2008, page 8
- Ageev & Khuzina. "Public Control in the Russian federation as a means of anti-corruption enforcement" The Journal of Legal, Ethical and Regulatory Issues 19, 2016, 7-12
- Houston, DA "Can corruption ever improve an economy?", Cato Journal, Vol. 27 No. 3, 2007, 325-342.
- Andrei Shleifer and Robert W. Vishny, "Corruption", The Quarterly Journal of Economics., Vol. 108 No. 3, 599-617
- Gumerov et al (Gumerov, TA, Habibullin, NE, Khodzhiev, AR, Galeev, NR, & Mukhametgaliev, IG). "Concept and criminological characteristics of corruption criminality". The Journal of Legal, Ethical and Regulatory Issues, 19, 82-87
- Young Jong Kim and Eun Sil Kim, "Exploring the interrelationship between public service *motivation and corruption theories*". Efidence-based HRM. Vol. 4 No.2, 2016, 181-186
- Kathy Richards, "What works and why in community-based anti-corruption programs". Transparency International Australia. December 2016
- Dariush Rahmati and Sayyed Mehdi Khadem, "Policing Affairs in Different Cultures", European Online Journal of Natural and Social Science 2015. Special Issues on New Dimensions in Economics, Accounting and Management. Vol. 4 No. 1, 2015
- Marcus Priyo Gunarto, "Criminalization and Penalization in the Context of Functionalizing Perda *Tax and Retribution, Doctoral Program in Legal Studies* Diponegoro University Semarang, 2008, pp. 71-72