

The Convergence of the Era of Disruption, Industri 4.0, and Society 5.0

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Industry Era 4.0 which is also known as Disruption Era is a development of digital world that is inevitable. The acceleration of access to communication and information is happening so massively as part of a new habit of human behavior today. The changing has become a natural cycle. Innovations mark human thinking. The consequences are not only about creativity but also destruction. Those who are not ready for change will feel disruption is a scary era. In fact, the disappearance of old habits is not a new problem. The old ones changing into new ones is how life cycle works.

The disruption era does not only have an impact on economic growth or the business world and social movements, but it is significantly felt in the cultural setting. The era of disruption is actually the era of innovation in life. Humans give birth to technology which is also a part of culture. Current technology is rapidly shifting old habits. Quick adaptation is needed to avoid culture shock. Colleen Ward urges that culture shock caused by cross-culture contact is inherent (Ward, 2001: 45). The era of disruption was the quietest way to cross-culture. Disruption initiates the birth of a new, more innovative and massive interaction model. Disruption marks the start of the democratization of knowledge which creates an opportunity for anyone to be able to utilize the world of technology more productively (Bashori, 288-289).

Industry era 4.0 was firstly discussed in the World Economic Forum formulated by Klaus Schwab in *The Fourth Industrial Revolution*. The discussions about the era of industry 4.0 took place in Germany at the Hannover Fair 2011. The fourth industrial revolution creates a world in which virtual and physical systems of manufacturing globally cooperated with each other in a flexible way (Schwab, 2016: 12). It sorts of parsing the globalization chain. The movement of the industrial world is no longer linear. Accelerating technology for all humans can be connected easily, quickly, and cheaply. The situation then developed, this era was like cutting off the hands of working humans, then the State of Japan offered a new system by launching Society 5.0.

Society 5.0 was stimulated by the realization that the digital revolution would involve disruptive transformations of all industrial and social systems. Society 5.0 first appeared in Japan in 2016. Society 5.0 "can be defined as a" society of intelligence ", in which physical space and cyberspace are strongly integrated (Salgues, 2018: 1). The vision of society that Society 5.0 describes requires us to think about two kinds of relationships: the relationship between technology and society and the technology-mediated relationship between individuals and society (Deguchi et al, 2020: 5).

The concept of Society 5.0 emerged due to the Industrial Revolution 4.0. Society is a human-centered and technology-based concept that has been successfully developed by Japan (Ahmadi, 2020: 13). The urgency of the synergy of the industrial revolution 4.0 is as a necessity with a mental revolution emphasizing aspects of community empowerment (Suwardana, 2018: 112). Society 5.0 is the answer for balancing the Industrial 4.0 era.

The technology in Society 5.0 is that which balances such solutions with the principle of a people-friendly society. Though the society is driven

by science and technology, it remains people-centric. The researchers and engineers working in R&D must bear this point in mind: Society 5.0 is a vision of a science and technology-driven society, but the goal of this vision is a people-centric society (Deguchi and Karasawa, 2020: 163). Society 5.0 considers technological aspects to facilitate human life, with the concern toward the humanities aspect so that the concept of balance is obtained in the implementation of technology. The goal is to reach a community that is defined as a super smart society (Sabri, 2019: 344).

Society 5.0 emerged from the hunter-gatherer society, the agricultural society, the industrial society and the information society. Although focused on humanity, 5.0 refers to a new type of society where innovation in science and technology occupies a prominent place, with the aim of balancing social and societal issues that need to be solved, while ensuring economic development (Salgues, 2018: 1). There was an industrial change in the 4.0 industrial revolution, starting from the era of mechanization, mass production, computer-automation, and now the digital revolution with the breakthrough of the internet of things or the age of cyber physical systems or intelligent automation. This is indeed important with the birth of society 5.0 as a counterweight. Society 5.0 is a change from hunter and gatherer societies, agricultural societies, industrial societies, information societies, and smart societies in terms of Society 5.0.

Both the digital revolution and industrial revolution are mutually sustainable to form a pattern of social life. The problem of the order of life can be resolved through a blend of industrial revolution 4.0 innovation with society 5.0. This relationship can play an active role in improving the quality of social life. The characteristics of both eras include digitization, optimization and customization of production, automation and adaptation, interaction between humans and machines, value added services and

business, automatic data exchange and communication, and the use of information technology (Raharja, 2019: 13). Synergy between trade and information technology has created the term e-commerce (Hendarsyah, 2019: 171). The development of e-commerce that causes commercial activities to reach the whole world (Ohoitmur, 2018: 145).

The spirit of Society 5.0 is the basis for the name of the seminar which will be held every year and this first year starts in 2019. A scientific meeting sharing convergent space to put forward discourse on disruption era, industry 4.0, and society 5.0 in a field of social and culture. The values referred from this seminar on the concept of Society 5.0 which positions humans as the center of technology control. Human intelligence is a capital that will not be used up to control life. It is not technology that control human's life. In the element of technology, culture is one of the elements marking the human's culture.

The era of disruption, the era of industry 4.0 and Society 5.0 are inevitable. The important thing to do is how to respond and interpret them. This industrial revolution needs to be guided that it can empower and be centered on humans. This global revolution is important to be a joint concern of various stakeholders across academic, social, political, national and industrial boundaries. This interaction and collaboration are needed to create a positive narrative (Schwab, 2016: 9). Society 5.0 seminar with the theme "Research With Multidisciplinary Paradigms" wants to take a position to be involved in the discourse. The scientific meeting that was built into a space for dialogue in reading and discourse of the era as well as positioning in the field of humanities, social, which refers to a grand word called "Culture".

Society 5.0 International Seminar invites keynote speakers from a variety of scientific backgrounds. **Tan Sooi Beng**, professor of music from

Malaysia, offers a study of local cosmopolitan music and hybrid music on Malay Songs that has links to discourses on nationalism, modernity, and advancing steps promoted in newspapers, literature and radio. Malay popular music from the gramophone era is cosmopolitan and inclusive. **Warong Wolangka** from Thailand studies environmental architecture through Lanna Manuscript literature. Perception of plants in Lanna's literary works is to better understand the landscape of plants and the making of places in the Old City of Chiang Mai. **Rizka Raisa Fatimah Ramli** with her comic works that have brought her to international events. This smart and creative teenager explains her experience in the creative process of making comics. Specific analysis on the issue of bullying which most people do not dare to reveal let alone report. **Chung Shefong**, Director of Music for Film and Festival from Taiwan, discusses the Narrating Indian Chinese Diaspora: Documenting History through Lenses, Sounscapes and Archival Exhibitions.

Many interesting things offered by other speakers, especially related to the issues of art and culture in a comprehensive manner. Their studies cover Music, Tradition and Contemporary Dance, Design, Film, Poster, Ceramics, Batik, Popular Dance, Traditional Building Architecture, Mythology, Creative Work, and Social Systems. One of the other special things about this international seminar is that it does not only invites speakers to present posters of research but also invite art performances. **Een Herdiani** and **M. Lahandi Baskoro** et al present their research posters. **Arthur Supardan Nalan**'s art work entitled "The Song of Wilotama" is a performance showing an innovative work combining theatrical and multi-media. The other art works are "Beusajan Saban" from Aceh by **Fitra Airiansyah**, music works featuring collaborative music from English musician **Henry** and from Iran **Shafie**.

The wealth of traditional dance is so abundant. Various studies are carried out as a way of actualizing which tradition is an attraction for the younger generation. The study of traditional art is described in several papers, including: **Ai Mulyani** revealing the local wisdom of the people in the Peacock Dance as one of the icons of West Java. The Peacock dance which was firstly created by a dance maestro, R.Tjeje Somantri, has a subtle and interesting motive as a symbol of expression of the subtlety of the mind. The Peacock dance that was created has grown from the 1950s to the present, becoming one of the types of dance that are in great demand by millennial generations. **Lalan Ramlan** et al, presents the aesthetics of the Réndéng Bojong dance by Gugum Gumbira, which was created in 1978. This kind of pair dance aesthetics was formed in three choreographic structures, namely the shape and structure of dance and cosmetology; content; and presentation

Not only in West Java, studies of traditional dances are also carried out on dances from Batam and Aceh. **Denny Eko Wibowo** et al describes the shape and structure of the Jogi Dance as a Batam traditional dance. The choreographic and aesthetic analysis is strengthened by sociological studies to find its relevance between dance and the people of Batam. **Fifie Febryanti Sukman** et al traces the existence of the Ratoeh Bantai Dance as a traditional dance in Aceh including its inheritance patterns, which were strongly influenced by the perpetrators, the community, traditional leaders, and also the government.

Traditions remain grounded and become the foundation in the present creative process. Some works of art are created based on the results of research from traditional arts, such as **Ismet Ruchimat** studying Tarling as a type of music based on folklore that is famous in the Indramayu, Jatibarang and Cirebon regions. Through the process of his studies and

collaborative concepts of music, he produces "Dermayonan" a work of music made from Indramayu and Cirebon cultural dialects. **Lilis Sumiati** et al. analyzes *soder* as a very important dance property which also has its own charm. A study of *soder* enables her finding that the meaning of *soder* leading to the meaning of a whip weapon used in a war. This concept is then used in working on Dramatari Yuda Wiyata.

There are also several papers formulated based on Action Research. **Deni Yana** et al. applies the ATUMICS method (Artifact, Technique, Utility, Material, Icon, Concept, Shape) to carry out the empowerment process for ceramic craftsmen in Sitiwinangun as a Tourism Village. This is a method used in the effort to transform traditional artifacts into modern artifacts through the preparation, combination, integration or merging of elements. **Arifpermana Ratum** et al. reveals how the Circular Design Guidelines (CDG) as a guide in detecting an increase in global populations that have a negative impact on the environment. This is because of the linear production model, in which the process from raw materials which are sold, used, then burned or disposed of as waste. Circular design (CD) acts as a pivot point in implementing circular economic (CE) strategies. **Gayatri Meilinawati** et al. analyzes the evaluation of the implementation of the Integrated Service and Referral System (SLRT) in Repeh Rapih community group in Sukabumi City. Single window services (SWS) are currently important in responding to the era of Industry 4.0 and Society 5.0.

Media studies are always interesting issue to discuss. **Asidigisianti Surya Patria** et al. analyzes the poster of a film through visual analysis of the forms of images, texts used, color selection, types of fonts used. The posters of the 70s were drawn manually with a choice of contrasting colors between the background, images and selected text. Similarly, **Desy Nurcahyanti** et al. describes how the process of extracting the character of

batik as a way to adapt culturally, socially, and economically in the era of Society 5.0. for the sustainability of batik as Indonesia's cultural identity. **Rini Maulina** et al. applies a mix-method and research-based work of art on the philosophy of *Indung* (mother) in Sundanese culture. *Indung Artwork* is manifested in batik and glass paintings.

The study of locality and its contextualisation with the present formulated in several papers including **Nani Sriwardani** et al. examining *tepas* as one part of a traditional houses in Kampung Pulo. *Tepas* has the function of a receptionist in the sense of 'filter room' before entering the house. *Tepas* is strongly placed as a space for social interaction, a gathering place for families, between community groups and guests. Kampung Pulo is a traditional village which is now becoming a cultural attraction. **Nia Emilda** et al. describes the results of her study on *Pamali* (taboo). There are two taboos which are analyzed. First, the prohibition to build a house with a prism-shaped roof, on the contrary, the roof must always be a gable roof (*suhunan jolopong*); and second, it is not allowed to increase or decrease the number of main buildings and family heads.

The study of literary works has its own passion, let alone related to the issue of masculinity that will never be exhausted. **Resti Nurfaidah** examines the issue of masculinity in the novel of *Puya ke Puya* and *The Trilogy of Darah Emas*. The analysis uses Beynon's key factors, namely: historical location, geographical location, age and physique, sexual orientation, education, status and lifestyles, ethnicity, religion and beliefs, culture and subcultures, as well as class and occupation.

References

- Ahmadi, Farid dan Ibda Hamidulloh. 2020. Konsep dan Aplikasi Literasi Baru di Era Revolusi Industri 4.0 dan Society 5.0. Semarang: CV. Pilar Nusantara.
- Bashori, Khoiruddin. 2018. Pendidikan Politik di Era Disrupsi. *Sukma : Jurnal Pendidikan*. 1 (2), 287-310. <https://doi.org/10.32533/02207.2018>.
- Deguchi, Atsushi, and Karasawa, Kaori. 2020. Issues and Outlook. dalam Hitaschi-UTokyo Laboratory. 2020. Society 5.0. A People-centric Super-smart Society. Japan: Spring Open.
- Deguchi, Atsushi, dkk. 2020. What Is Society 5.0. dalam Hitaschi-UTokyo Laboratory. 2020. Society 5.0. A People-centric Super-smart Society. Japan: Spring Open.
- Hendarsyah, Decky. 2019. E-Commerce di Era Industri 4.0 dan Society 5.0. *Iqtishaduna Jurnal Ilmiah Ekonomi*. 8 (2), 171-184.
- Ohoitmur, Johanis. 2018. Tantangan bagi Perkembangan Ilmu Pengetahuan dan Peluang bagi Lembaga Pendidikan Tinggi. *Respons*. 23 (02),143-166
- Raharja, H. Y. (2019). Relevansi Pancasila Era Industry 4.0 dan society 5.0 di pendidikan tinggi vokasi. *Journal of Digital Education, Communication, and Arts*, 2 (1), 11–20.
- Sabri, Indar. 2019. Peran Pendidikan Seni Diera Societt 5.0 Untuk Revolusi Industri 4.0. Seminar Nasional Pascasarjana 2019 ISSN: 2686-6404
- Salgues, Bruno. 2018. Society 5.0. Industry of the Future, Technologies, Methods and Tools. United States: ISTE Ltd and John Wiley & Sons, Inc.
- Schwab, Klaus. 2016. The Fourth Industrial Revolution. World Economic Forum. Cologny/Geneva Switzerland. [www. Weforum.org](http://www.Weforum.org).
- Suwardana, Hendra. 2018. Revolusi Industri 4.0 Berbasis Revolusi Mental. *Jati Unik*. Volume 1 (2), 109-118.
- Ward, Colleen, dkk. 2001, *The Psychplogy of Culture Shock*, USA: Routledge.