



ADVANCING ASIAN SPECIAL LIBRARIES TOWARDS THE FIFTH INDUSTRIAL REVOLUTION

**Proceedings of the 8th International
Conference of Asian Special Libraries
(ICoASL 2023)**

Stephen B. Alayon, Willian S. A. Frias, Rosally D. Funclara
(Editors)

**22-24 February 2023
University of San Carlos - Talamban Campus
Cebu City, Philippines**



Organized by the **Special Libraries Association – Asian Community (SLA-Asia)**
in collaboration with the **Association of Special Libraries of the Philippines (ASLP)**
and **Cebu Librarians Association, Inc. (CLAI)**

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Breaking the stigma of Indonesian library professional disruption in the Industry 5.0 era

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Abstract

Professional disruption has haunted some librarians, especially during the industrial era 5.0. The librarians' concern was triggered because there has been a lot of transfer from human technical activities to technological systems. Currently, the role of librarians such as classification or cataloging activities, has been handled by a computerized system. It provokes librarians' feeling that their position can be replaced. It is undeniable that today's technologically manufactured products are made to be able to analyze more accurately than humans. However, humans should be leaders in the industry 5.0. Due to this concern, the researchers want to dispel the notion of librarian disruption by Blasius Sudarsono's Basic Indonesian Library Framework (KDKI) concept and society 5.0. The research implements a literature study method with an integrative approach. Data were collected from various relevant literature, then analyzed by harmonizing and comparing the collected literature regarding the KDKI concept, society 5.0 and other supporting data. The results of the analysis found that librarians do not need to worry about the future of their profession; upgrading themselves is the main key. Although technically many have been replaced, librarians can use their cognitive abilities and are oriented toward enabling people.

Keywords: *Disruption, Industry 5.0, Librarianship*

Introduction

Professional disruption has haunted some librarians, especially the fast access to the Internet, robotics, and artificial intelligence. Learning from the covid 19 pandemic, restrictions on visiting the library did not seem to be a concern. People could find learning support through one medium, namely computerized devices and the Internet. The authors experienced the same thing. While the authors were doing online learning, they surfed for material on the Internet. The librarians' contribution maybe poorly understood, when the library is passive without innovation. Threats also come from the internal library. The switch to the use of digital books makes the catalog system experience a paradigm shift.

Artificial intelligence was designed by many technology experts to provide an accurate analysis of certain things. Even in the realm of dentistry, artificial intelligence has begun to be designed with data-based and robotic treatment models (Grischke et al., 2020). Although the medicine has entered a new era, the librarians' fate in carrying

out their profession is still questioned. This problem happened because analytical activities can be replaced by computerized systems which offer instant journal reviews, as well as more precise classification skills. In addition the circulation service in some libraries now use automatic machine, which is applied in UIN Sunan Kalijaga Library.

Even more complex, vendors offer digital library system. They have provided services that do not require users to go somewhere; all activities are wrapped in one system which is equipped with metadata and easy access features (Vasileiou et al., 2013). Even, Dubai's Mohammed bin Rashid Library has implemented robots to help find collections. Heeding the changing pattern of libraries towards technology, Indonesian librarians are challenged with the new trends, where students prefer coffee shops than libraries because they offer fresh and positive environment that is more conducive to studying (Yolanda, 2020).

The notion of a profession being lost is not unwarranted. The technology is a factor in the paradigm shift, especially in the case of librarians. The phasing out of librarians is associated with their role as the technical managers in libraries. The ease of reading has been felt by the community, simply by reading directly or downloading books through technological devices. The application of technological innovations also minimizes the librarian's duties such as circulation services. Borrowing and returning books are carried out by users independently using machines (*10 Macam-Macam Pekerjaan Yang Akan Hilang Di Masa Depan*, 2020; Okezone, 2019). This can be a concern for students pursuing careers in library and information science, as they need a strong foundation to be resilient in facing the era of disruption.

The existence of librarians is still a challenge today. Various studies have been discussed to support the strengthening of the librarians' role. The discussion about the development of librarians in the society 5.0 era is no longer new. A previous research entitled *How To Improve Librarian Personality In Society 5.0 Era: Case Study at Governance Institute of Home Affair* discussed the development of librarians in the society 5.0 era, namely. The results of this research explained that librarians need to develop soft skills in the form of listening skills, communication skills, and public relations skills (Wijonarko, 2020). However, the scope of this research is still on interaction techniques, while the order of changing the mindset and self-awareness of librarians is yet to be tackled. Changes in the characteristics of society and technological innovation need to be followed by improvements from within the librarians.

In this study, the researchers want to carry out this research as a follow-up to provide other alternative ways in improving the ability of librarians in the Industrial Age 5.0 and society 5.0. Industry 5.0 is an era of human integration with robots to assist in decision-making (European Commission. Directorate General for Research and Innovation., 2020). Society 5.0, on the other hand, focuses on the social and humanities aspects of this integration. Therefore, librarians can create "Super Smart" society ("Society 5.0: A People-Centric Super-Smart Society," 2020) through their expertise in managing and disseminating information.

Through this article, the researchers present the integration of the Blasius Sudarsono's Basic Framework for Indonesian Librarianship Concept and The Society 5.0 Concept to support the development of librarian 5.0. This integration is a way to connect human, social, knowledge, and technology into one frame; and to strengthen the roots of the librarian profession in providing services to the community. Society 5.0 carries the humanistic approach to technology, in which technology is integrated into human life. Thus, librarians must be able to adapt and evolve, to break free from

their traditional roles and embrace new technologies to overcome the boundaries of space and time in the era of the latest technology.

Research Methodology

This study uses an integrated literature review method by combining various sources to bring up fresh insights in scientific development (Snyder, 2019). Researchers examine the literature surrounding the Basic Framework for Indonesian Librarianship (KDKI) concept with the society 5.0 concept in the industry 5.0 era. It is to broaden the horizons of Indonesian librarians who are consistently demonstrating their existence. The study employs a literature review approach and uses a comparative analysis to align articles on KDKI, Industry 5.0, Society 5.0, and librarians. The research results are described descriptively, in the form of a concept to counter disruption of the librarian profession in the industrial era 5.0.

Discussion

Disruption of the Librarian Profession in Indonesia in the Industrial Age 5.0

Netizens, or the virtual community, talk a lot about disruption which is increasingly being fueled by sophisticated technology. Despite the ongoing discussions, it is research on this topic remains relevant and necessary. It needs to be reviewed from a broad perspective, so that thoughts of professional disruption will no longer haunt professionals engaged in the service sector, including the librarians. It is reflected as a societal stereotype of librarians' habitual activities (Jennings, 2016).

Researchers often talk about library education and the librarian profession with the general public in Indonesia and they are still amazed and interested. Despite librarians explaining that they are responsible for collection management, it is a task that can be easily taken over by robotic systems like The Joe and Rika Mansueto Library, which uses the automatic storage and retrieval system. This system makes the work of librarians easier because the system is smarter and more reliable for the collections storage and retrieval process (Library's, 2008).

The climate for fulfilling information is fast-paced. It is only natural that technology systems continue to infiltrate libraries. Libraries in Indonesia, which have various concentrations, experience many challenges. For librarians who are technology-native, it may not be difficult to follow this direction. However, for librarians who come from social faculties, such as cultural studies and communication sciences, they need extra effort in following the concept of a library with computerized and connected system. The diverse clusters of librarian expertise are the starting point for rising in Industry 5.0 or Society 5.0 because they adhere to humanity. Humans lead the use of technology, promote positive impacts, and do not fade human character as social beings (European Commission. Directorate General for Research and Innovation., 2020; *Society 5.0: A People-Centric Super-Smart Society*, 2020).

Researchers will review how the librarian profession stands in the industry 5.0 era to maintain the dignity of the librarian profession in the next sub-chapter. First, it was necessary to know in advance the meaning of the profession. The profession is attached to the subject or human-self such as doctor who has expertise in the medical field. Even though he is off duty from the hospital, he is still referred to as a doctor. It is the great hope that the librarian profession can become a profession that makes a

real contribution to society, combining technology and social science. Evett (2014) states that profession is a category of knowledge-based work obtained from higher education, training, and/or experience. Professionals are involved in helping people overcome or provide alternative solutions to problems that occur (Abadi et al., 2020).

Corresponding with this professional concept, the librarian profession has no doubts about entering the industry 5.0 era. Knowing the human self-concept about personalities and oneself is an important point for librarians and even prospective librarians. Adopting the thoughts of Karl Marx, knowing the profession within yourself keeps the librarian profession away from alienation from technological advances. Technology exists because of human thinking which is only natural for humans to become leaders of various kinds of technology (Pals, 2015). Independently, humans with their awareness and knowledge can control all their activities, to get out of isolation (Raekstad, 2018). Likewise, the librarian profession could determine their attitude to avoid alienation in the Industrial Age and playing a direct role into the layers of society.

Foundation of Librarians in the Industrial Age 5.0

The Basic Framework for Indonesian Librarianship (KDKI) concept can be used as a foundation for librarians to stand on in the Industrial Age 5.0, especially for prospective librarians. They need to understand the nature of the librarian profession. The concept of KDKI was introduced by Blasius Sudarsono using a linguistic approach and human philosophy from Driyarkara regarding personalities and oneself (Sudarsono, 2021). The birth of KDKI began with the study of five words, namely reference (Pustaka), literature (Kepustakaan), library (Perpustakaan), librarian (Pustakawan), and librarianship (Kepustakawanan).

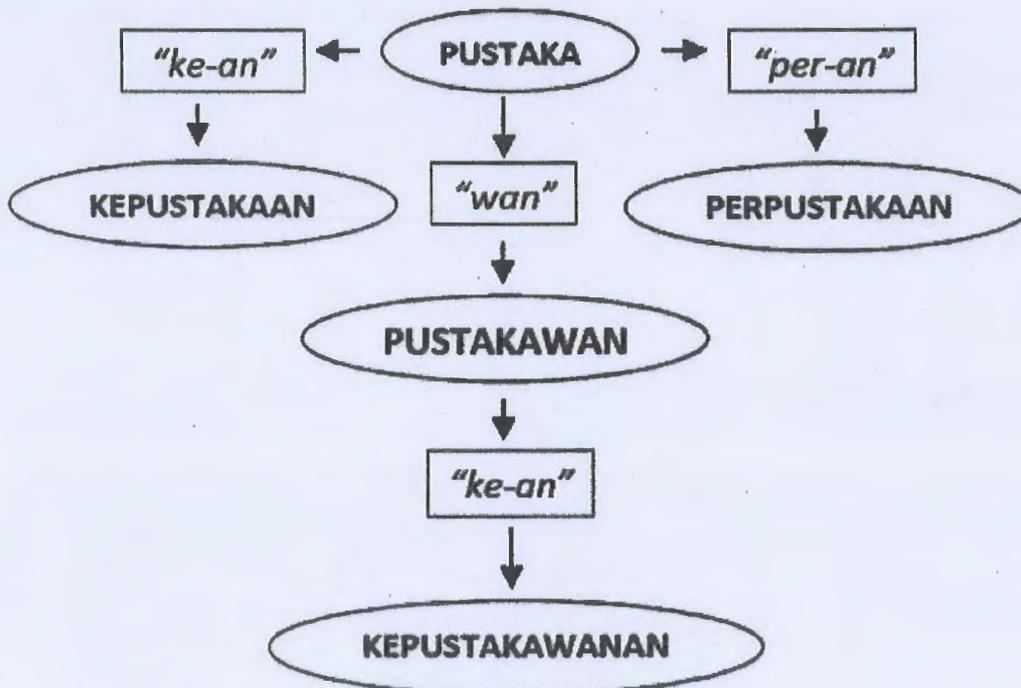


Figure 1. Five-Word Family Chart

Those five words, which are connected with one another, described as the growth of a tree that supports the roots, that is librarianship. The position of librarianship as a root assumes quite complex meanings for the other four words, a source of life for the existence of librarians, libraries, librarianship, and libraries. Equal to the concepts of industry 5.0 and society 5.0, technology and information are part of the three words: reference, literature, and library.

Technology, information, and knowledge can merge into these three words; information is part of the library; technology is the efficiency of library management; and knowledge is part of the library ("Reference, Literature, and Library," 2022). The chart explains that it was not the industrial era that disrupted the librarian profession, but how librarians brought them above it in a better direction to keep up with the latest times. Determining direction certainly has a strategy, namely the self as a human being, reflected in personality. The librarianship concept in terms of Driyarkara's theory created three ownself keys: educated, cultured, and ideologized librarians. All three are part of the central KDKI concept, along with the details of the meaning of the three (Kaharudin & Arfa, 2022):

a) *Educated Librarian*

Librarians can become learners and educators. Librarians learn to upgrade cognitive abilities, but it emphasizes implementing their knowledge for the humanization process in society. Libraries as places of life-long learning, while librarians can become informal educators for the community. Unlike teachers, librarians, with their knowledge can connect the community with sources of knowledge. This aspect of personality is aligned with the goals of Society 5.0, making a "Super Smart" society ("Society 5.0: A People-Centric Super-Smart Society," 2020). Learning and teaching activities are part of the maturation process, which utilizes their minds to reach maturity attitudes towards Indonesian society. For the success of being educated, librarians are required to think logically, analytically and critically; read, write, and be capable of entrepreneurship.

b) *Cultured Librarian*

A cultured librarian is defined as the process of cultivating his personality following the dynamics of globalization. Indonesian librarians are expected to be more dynamic following the changing generations. It is essential to a just in all conditions because existence can also be interpreted as "the state of being present or of being condition" ("Existence," 2022). This state means that librarians must carry out their duties according to conditions to increase their dignity in society. For example, in the industrial era 5.0, librarians have to accustom themselves to following a computerized system and forming information into knowledge and truth. In addition to acculturating themselves to go with the global flow, librarians also need to cultivate the ethical and moral values of the Indonesian nation.

c) *Ideologized Librarian*

Ideology is closely related to achieving goals in life through the KDKI concept. Blasius Sudarsono has explained that librarians have three ideals: to be smart, to be rich, and to be right. All three can be achieved after librarians

have four supporting pillars: motivation, education, and culture. Librarians can also draw the essence of Pancasila ideology which contains historical values, character, and the human spirit. They are all lessons for librarians on self-reflection, self-implementation, also the direction and goals determination of the profession.

The linguistic and philosophical review became the forerunner of the KDKI. To strengthen librarians, Blasius designed the KDKI structure into four main points, namely:

- **Four Supporting Pillars**

1. Librarianship is a calling in life;
2. Librarianship is the spirit of life;
3. Librarianship is a creation of service;
4. Librarianship is professional;

- **Five Main Powers**

1. Logical, Analytical and Critical Thinking
2. Ability to Write
3. Ability to Read
4. Entrepreneurial Ability
5. Upholding Ethics

- **Three Main Goals**

1. Be Smart (Bright)
2. Getting Rich (Rich)
3. Being Right (Right)

- **Final**

HUMAN PERFECTION, HAPPY LIFE, AND BE USEFUL TO
FELLOW

Observing this concept, researchers argue that it needs to be implemented by librarians to navigate the industrial era 5.0. Placing librarians in the center of activities create the meaning or knowledge of the information; and uses the latest technology to help provide welfare for the broader community beyond their position as librarians (European Commission. Directorate General for Research and Innovation., 2020).

The emergence of the industrial era 5.0 forced librarians to do more, not only within the internal scope of the library but also external parties, even though at a far distance. Behind the main work in library institutions, Indonesian librarians can get involved in helping to explore issues that overshadow interactions between humans, utilizing the technology they have. This reflects- that good things do not always come in comfortable work. Blasius Sudarsono suggested that librarians have a sublimation attitude, such as changing solids into gases. Librarians need to be adaptive to environmental changes, especially in the industrial era 5.0.

Implementation of the Librarianship Concept in 5.0 Industrial Age

Through this research, researchers provide the concept of strengthening librarians in the Industrial Age 5.0 by integrating of Blasius Sudarsono's concept of librarianship with the society 5.0 concept. Researchers argue that Indonesian librarians need to have the following four abilities:

1) Critical

Every human being is provided with logic and mind to interact in a social sphere. Each stage of human growth has no other than logical thinking in each period or event, as was the case during the high school period. The logical thinking is certainly different when the growth process is in the college phase. Periods of logical thinking schools are intended to shape the personal character of students by considering the fluctuations of behavior. Meanwhile, when it comes to the intellectual area in tertiary institutions, the scope of phenomena is wider and logical thinking is directed towards scientific context. According to Foucault, thinking logically, have differences in each period because certain fragments of life give rise to different values (Ngaji Filsafat 62, 2020).

Likewise librarians in Indonesia, experience as professional changes in different industrial era. Librarians need to develop their logical thinking schemes and see the world as it changes broadly through virtual space through Internet interconnection. They have to be more critical in capturing community interactions with the use of technological innovations by every level of society. These sparked librarians to question strategic issues that are reflected in the environment of Indonesian society. Access to virtual space in the industrial era 5.0 signifies the ease of diving into the global horizon of knowledge.

To bring humanist-technology-based library services, a critical attitude is shown by increasing the reading of literature and environmental conditions of the library. Librarian thinking is trained to know the direction of library services globally. Through computer devices and Internet networks, librarians can access various websites, such as the International Federation of Library Associations, the American Library Association, and other associations in various parts of the world. Critical is also shown in practical actions. Librarians can visit several places around the library. The visit aimed to see the gaps in society to think about the origins of the existing problems.

In addition to carrying out basic tasks in agencies, librarians need to see the accessibility of digital information. Librarians then observe social changes, for example, in the modern era seeing the massive reading of people via laptops and smartphones. Questions that arise on an issue encourage us to break down and find out the causal factors so that the librarian's brain memory has various thoughts about the core problem of each issue. The essence of this ability is intended to build curiosity among librarians for theoretical and practical knowledge (Alsaleh, 2020).

The habit of asking critical questions in mind recorded much related theoretical and practical information. For example, it can be reflected in how the library contributes to The United Nations 2030 Agenda. The library provides access to information and opportunities to improve the life of the wider community, not only through collections but also through the interaction of officers and users (Gayshun, 2016). Then, the data in the memory of the librarian's mind is synergized with learning styles that are currently trending. Industry 5.0, in this case, acts as a horizon of

knowledge, seeing world library trends through websites and the state of the library environment.

2) *Analytic*

After thinking critically, librarians should be able to interpret situations or information contained in virtual space due to human interaction. Analytical abilities are task-oriented, communicative with users, and serve users in transferring knowledge (*What Librarians Need to Know*, n.d.). The succession of knowledge transfer depends from the librarian's understanding ability so that knowledge can be accepted by societies, individuals, and groups. Reliable analytical skills help librarians fall into possible problems that may arise in the future. Therefore, they have prepared anticipatory strategies when the latest industrial era comes. The presence of Industry 5.0 also facilitates librarians' tasks because it can be done in real-time without pauses, and updated knowledge circulates faster ("Society 5.0: A People-Centric Super-Smart Society," 2020).

The memory of the human mind has limitations in elevating something and actualizing thoughts in writing. It is intended to keep the meaning of an event or knowledge from being lost and serve as evidence to build arguments (Alsaleh, 2020; Makdisi, 1981). Writing the results of ideas is actualized in library development documents to improve people's lives. Librarians can realize in scientific writing to describe the appearance and combination of observed information. This allows librarians to interpret student learning behavior change combined with The United Nations 2030 Agenda. Librarians can provide various of learning services by utilizing the availability of more time and space due to the technology application. This means that librarians must put themselves as an individual learner.

Improving the analytic ability of librarians can be started in their field of work. Analytical skills are intended to find solutions for gaps or problems, especially in making strategies or planning library development. So that librarians can change systems, procedures, and work programs that are considered inappropriate or harmful. One of the researchers once found a level library with a relatively complicated system of borrowing public collections for members. The borrower needs to leave a guarantee in the form of a residence identity card, health insurance card, or driving license card under the pretext of a form of responsibility when the stock opname can be identified.

Considering the importance of the guarantee card, librarians need to review it because users have also been registered as members, even though checking can be done through member data. This means that any policy needs to be based on an in-depth analysis by librarians to find its positive relevance and usefulness. Because the library is service-oriented, changes are insufficient at the management level. The ability to analyze users as interlocutors need to be done to get the same understanding.

Communication style is an integral part of a dialogue. Unfortunately, proficiency in knowledge is not matched by proper communication. From the researchers' experience, asking for access to an Internet connection was complicated because they had to create an account first, which would be verified in about two days. Of course, it is disturbing to hear the statements. It turns out that when they try to make the account, it only takes a few minutes for the verification. It may differ when they confirm the minimum and maximum time for verification first, then answer by giving the fastest and longest estimated time. The readiness of librarian communication should be a concern, especially when the librarian is as a consultant for users who facilitate the transmission of knowledge.

Supporting the vision of "Super Smart" by society 5.0, librarians continue to analyze to get the best strategy for forming information into knowledge and transmitting it to users by understanding and packaging knowledge, practicing skills, and having a confident attitude (Echols, 2021). Through developing skills according to passion, librarians will have particular competencies outside the library, such as social, arts, culture, nature, and others. That special knowledge can be transmitted to users who need it and practiced together. The practice also requires commitment through implementation within the librarian himself. Confidence is shown by strengthening arguments that are built based on reliable literature.

3) *Innovative*

Changes in the paradigm of life give rise to a varied and unique community mindset in every activity. The manufacturing industry continues to update the use of technology systems, as the profession enters the industrial era. This condition was explored in Indonesia. Vehicles are still being directed to apply environmentally friendly energy, such as diverting it to electric energy-based vehicle systems and remote control-based systems (Wishnumurti, 2021). Humans can have complete control over their vehicles, even outside driving operations.

It is time for librarians to transform, adapting to all the technology applications in various parts of library management. Librarians can take control of service practices through various innovations, such as automatic borrowing and returning collection services through machines, visitor data collection via barcode scanning, or library services via the website. The librarians have been facilitated; they only need to monitor and develop the service system. They can carry out other activities directly related to the community's social life.

Side by side with the social conditions of society, librarians also need to be adaptive to all technological devices or applications. Many technology experts have made breakthroughs to create interactions in virtual space, such as Youtube, Instagram, and Twitter. Youtube, Instagram, and Twitter platforms can be used as virtual libraries with communicative collections of knowledge from various disciplines. The adaptive form can be observed from the ideas of librarians at the Salatiga City Library and Archives Office. They succeeded in utilizing Youtube as a medium for sharing local knowledge in the city of Salatiga and using Instagram and Twitter to interact with the public about activities in the library (Dinpersip Salatiga, n.d., 2013).

When it comes to society 4.0, it focuses on being profitable. Currently, humanity is the primary goal of the era of society 5.0. It becomes a challenge for librarians to make innovations integrating technology, society, and economics; and see how librarians should act. The diversity of librarian science concentrations in Indonesia is an advantage for integrating these four sections so that virtual and real space can be connected. Librarians enter reality conditions in virtual space, and users can access knowledge from virtual space to be implemented in their own lives.

It has been explained previously about the use of social media, then the problem of the interaction between librarians and users which, occurs in cyberspace, should be solved. The Salatiga virtual library is an example of its implementation. Librarians can bring virtual visitors to feel the atmosphere of the library environment (*Launching Salatiga Library Tour*, 2022). Adaptive means that librarians do not lose the idea of forming a librarian image. They can easily make videos like someone visiting the library and share them through an integrated website that also provides

special collections in digital form. The next innovation is in the form of a joint catalog, which is a synergy between public, school, special, and tertiary libraries.

This innovation makes it easier for people to take advantage of library services. For instance, people who are curious about the library can visit the library virtually. Furthermore, when someone needs a collection, they can efficiently search through the shared catalog and ascertain the quantity and location of availability of the collection. The use of technology as a medium builds a positive image for the library as a place that they can use either at home or in the coffee shops.

4) Collaborative

Maybe with the provision of various abilities that librarian can work on the innovations that are formed, yet it feels less than optimal if the work is done simultaneously by one librarian. The diversity of concentrations in Library and Information Science (LIS) education in Indonesia is a solution. Each university LIS program is placed in different faculties, such as technology, communications, and humanities. This means that librarians have abilities with various concentrations and the industrial era 5.0 is the momentum for everyone to collaborate.

Scientifically, graduates of the LIS program can work together to develop ideas or concepts through available organizations, such as the Indonesian Librarians Association, the Indonesian Association of Library and Information Science Scholars, and others. They can formulate long-term concepts arranged in one frame, another contribution is conducting joint research. Many topics intersect with technology, economics, society, and culture. However, to develop libraries academically, requires interdisciplinary studies to provide more complex results.

After professional strengthening through personal collaboration, librarians can carry out institutional collaboration. Librarians can reflect on the innovation in Salatiga City Library which provide circulation services through online taxibike. The public can take advantage of the collection without having to come and the use of technology supports this service. In addition to the convenience for librarians and users, it also contributes to the income of online taxibike drivers. The attitude of collaboration makes it easier for the public, librarians, and other field workers, supported by technological systems controlled by humans.

Another common form of collaboration is in library applications that provide digital collections. Librarians can collaborate with application developers. The developer really opens up opportunities for collaboration with libraries to build digital libraries, as was done by the management of Gramedia Asri Media (Gramedia, 2022). This means that the presence of technology is not to eliminate the identity of librarians, but how can librarians direct the use of technology systems in the industry 5.0. The role of librarians is getting lighter. Librarians can do other supporting work, such as gathering user wishes for a collection and also providing input on technology implementation with the user's target conditions.

5) Holding up Ethics

Advances in information and communication technology need to be accompanied by strengthening the ethics of each individual. Using of technology without ethics will certainly bring up new problems that can become serious. The point of this section is to put technology at its function. Technological updates does not create a hazard, for example in a cyber crime or other negative effects. It arises because of technology and because of how humans share and obtain information. The

knowledge about plagiarism and content censorship that librarians have can be applied to prevent a negative effect on the digital platform.

As they aim for a "Super Smart" society, librarians campaign for the noble ethics of the Indonesian nation. One of the visualizations is that librarians' work activities need to consider the interests of other people. The ethics of librarians is intended to enable people (Christiani, 2021), which means librarians are not selfish in following their ideals. Side by side with collaboration and adaptation, librarians need to have a sense of understanding when there are more effective and efficient management ideas, leaving traditional library practices. Then, librarians should not ignore their users even though the service activities have been more practical due to the application of technology. One of them is cultivating self-awareness when they see confusion, not waiting for users to ask questions but being responsive to their problems.

Conclusion

In industry 5.0, librarians no longer need to worry because they can play an active role in the social environment through manufacturing technology. In the concept of the 5.0 industry, librarians are directed to the control of technological innovation tools in carrying out their functions. However, if stakeholders only deal with manufactured products, they still not feel the contribution of librarians to broader societal problems. To reach that, librarians can apply the concept of a 5.0 society, forming a "Super Smart" society. The development of librarians is not based on theories in the field of library and information science. However, personalities are also an essential aspect because the ability of librarians is not born instantly. The core of the struggle in the 5.0 industrial age is the willingness to upgrade self-quality. Librarians can explore their work until becoming enabling people. To achieve that, five abilities need to be improved, namely critical, analytical, innovative, collaborative, and ethical practice.

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