

The Role of Librarians in The Era of Society 5.0: Missing or Increasing Importance?

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Abstract

Background of the Study: The development of the era of *society* 5.0 made the library participate in this development. The library is a combination of virtual and physical space to meet users' information needs as a *society* 5.0.

Purpose: This study reviews the existence of libraries and librarians' roles in the era of *society* 5.0, whether they are lost or survive in the new phase.

Method: This study used an explorative method, it employs a number of scientific procedures, including data collection from libraries, reading and taking notes, and transforming the results into narrative writing..

Findings: Libraries and Librarians continue to thrive in the development of the *society* 5.0 era. Libraries, and librarians increasingly have a role. Library developments that can be developed in this area include robotics in libraries, Self-Service Services, Digital Libraries, Information Consulting Services, and Digital Consulting Services.

Conclusion: Libraries and Librarians are still needed and essential in the era of *society* 5.0 in library development. Librarians must work scientifically and ensure professionalism while carrying out their duties and functions in library development to meet *society's* 5.0 users.

Keywords: *Society* 5.0, Library, librarian

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Introduction

The librarian is a resource that drives other resources and becomes the spearhead in disseminating information in society. The definition of a librarian is also contained in Law No. 43 of 2007 which reads "Librarian is someone who has competence obtained through librarianship education and or training and has the duties and responsibilities to carry out library management and services ([Law of the Republic of Indonesia Number 43 of 2007 concerning Library, 2007](#)). Society 5.0 is a human-centered society that balances economic progress with solving social problems through a system that effectively integrates cyberspace and physical space ([Fukuyama, 2018](#)). First launched in Japan in early 2019, society 5.0 as economy and citizens centric promotes the idea of a Knowledgeable Society in which information technology would define the characteristics of a new super-intelligent organisation ([Haque et al., 2021](#)). The digital transition will fundamentally alter many facets of society, and influence livelihoods, industrial structure, private life, and public administration ([Nunes et al., 2021](#); [Palumbo et al., 2021](#)). The purpose is to build a society in which anybody may contribute value at any time and from any location ([Bibri & Krogstie, 2017](#)) in tandem with the sustainable plans produced in line with the 17 United Nations goals (UN, 2015). Emergence of society 5.0 signaled the overall social and systemic transformation that is preceded by change in operational attitude and professional up skilling by the professionals with the librarians at the core. Hence, libraries as a social institution and the librarians as the driver of the emerging society 5.0 services are expected to brace up to the innovations._

Currently, librarians are required to think creatively and prioritize innovation. Libraries are now required to continue to be creative in developing various new activities and creativity in order to develop the library. In accordance with the 2011 National Library of Indonesia National Library Standards (SNP), librarian qualifications are at least a bachelor's degree librarian in the field of library and information science, and actively involved in organizations as evidenced by a membership card or certificate. Libraries are managed by at least two librarians.

The changes that occurred in the era of society 5.0 in the order of human life where we see how changes from industry and technological developments in the era 4.0 where humans are faced with rapidly developing technological developments. Society 5.0 is human-centered era where humans remain the final determinant in decision-making for various solutions to social problems that integrate physical space and cyber space. Cyberspace is the term used to describe the digital environment in which information from the actual world is gathered and examined in order to find answers ([Hitachi, 2018](#)). Cyberspace with information systems and the Internet will transform our world in unprecedented ways by fostering economic expansion and introducing new channels for interpersonal communication, interaction, and collaboration ([Mbanaso & Dandaura, 2015](#)).

The era of society 5.0 has had an impact on various sectors in the field, one of which is the library. In the perspective of society 5.0, content is one of the elements that play an important role in media technology, especially digital media ([Sugiono, 2020](#)). In the context of the library, people in this era are people who are users of the library. This will affect what libraries and librarians will look like in the future in dealing with society in the era of society 5.0. In the library in society 5.0, the library relies on technological and human development as its controlling component. This can be interpreted that librarians remain a major milestone in library development. This does not mean that, with the presence of technology, the role of the library will disappear, but it will help librarians carry out their professionalism. This is as revealed in previous research ([Shashikumar et al., 2019](#)), that emerging technologies can



change libraries and library professionals and assist in staying up-to-date with the latest technological trends that assist in developing libraries.

There have been several studies that have been conducted and discussed the development of libraries in the era of society. The research entitled *How to Improve Librarians Professionalism In The Era Of Society 5.0? Case Study at Governance Institute Of Home Affairs*. aims to find out how the library at IPDN Jatinangor College is in society 5.0. The results of this study state that the development of soft skills is a capability that needs to be possessed in the era of society 5.0 through listening, communication and public relations (Wijonarko, 2020). The second research was conducted by *Emerging Technology Trends For Libraries And Librarians* which aimed to find out efforts for some of the main emerging technology trends for libraries and library professionals. The results of this study are that libraries change and adapt according to technological developments. The third research was entitled *Education 4.0 – 5.0 and the Post-Information Transformation of University Libraries* and aimed to look at the development of society in the transition from an information society to a post-information society, which is defined as the transition to industry 4.0 – 5.0. The results of this study where there are changes in creating and applying new knowledge. This paper also finds that there has been a change in the place and role of the university library after the development of information (Denchev & Varbanova-Dencheva, 2021). The research was conducted under the title *Digital Literacy for Librarians In The Era Society 5.0: Opportunities And Challenges* and aimed to determine the digital literacy abilities of librarians in the era of society 5.0. The results of this research where the context of digital literacy for librarians who have long been part of the library, but digital phenomena which are basically related to digital media users are still not optimal in their use in the era of society 5.0 (Hijrana et al., 2022). In a fifth article entitled *Study of Future Public Library Trends & Best Practices*, Palmer (2022) reveals that libraries of the future will undergo major changes: they will have fewer books and increase the available physical space; they will move from content warehouses to content creation advocates; they will cater to new types of audience including digital natives, knowledge creators, and entrepreneurial students. To achieve this goal, libraries must prepare technology, collaboration, physical space, and people (Palmer, 2022). The difference between some of the studies described in this study and previous studies is that many previous studies focused on higher education and the conceptual application of librarians and libraries in the future, whereas this research focuses on librarianship in facing the era of society 5.0 and its practical application to face and welcome it. This study aims to provide an overview and explanation of the roles and challenges of librarians in the future of society 5.0.

Based on some of the phenomena and the explanation above, it becomes the background for researchers to examine the challenges of libraries and librarians in dealing with the development of people who would become users of libraries. This research will discuss what librarians must do in welcoming society in the era of society 5.0.

Method

This study used an explorative approach through literature studies from several journals related to the role of librarians in the information society in the era of society 5.0 and documentation. Exploratory research acts as an option for initial research that offers a speculative or theoretical view of the subject since research on society 5.0, libraries, and librarians is a new research area with minimal data. This study is being done to learn more about the phenomenon and to identify the characteristics of Society 5.0 in libraries. It is an adaptable approach that lays the foundation for additional study. As a result, many information



sources were investigated, including public secondary data, information from other surveys, observation of study objects, and views regarding instances, products, or services. Major information for this study were collected from the Library data and published journal articles on the context, These were collected, read, and processed in order to create an understanding of the roles of society 5.0 in the libraries in one hand, and whether the libraries and the librarians are either lost or are increasingly important. The views, results and opinions from the reviewed literature and data collected from the libraries were used to make an informed decision regarding the aims of this study.

Result and Discussion

Library and Society Era 5.0

Society in the era of Society 5.0 is such that continues to grow along with increasingly industrial developments. The goal of Society 5.0 is to establish a society in which social problems are tackled by integrating the breakthroughs of the 4.0 into business and daily life such as the Internet of Things, big data, artificial intelligence (AI), and shared economy. The concept was introduced by the Japanese Government's Council for Science, Technology and Innovation to cater for issues like healthcare, economy, governance etc. (Kravets et al., 2021). Among the aims are to make the society a super smart society in which the people smarter. Contrary to the perspective of the 5.0 era in which technology holds sway, in society 5.0 perspective, the people/humans are the main component. Society 5.0 innovation is expected to achieve an insightful society, break a sense of stagnation and live in a sense of comfort. In this era of society, humans can find various solutions from various technological developments. We see the application of this era of society 5.0 happening in various sectors. Several sectors include health, education, agriculture, household life and others.

The library is also facing changes in society 5.0 where potential users of the library will be the people who are in this society. Libraries deserve to continue to grow or improve along with the progress being experienced with society 5.0 services. The foundational issues of most libraries, and their inability to adapt to the changing environment are the perceived problems. It is envisaged that technological developments will remain the main foundation in library development in this society, however, humans/people still the main determinant or drivers of all the activities in the library. We can see the development of libraries from the 1.0 to 5.0 era, namely

- a. Society 1.0 where lending is still manual
- b. Society 2.0 library automation system
- c. Society 3.0 The development of database systems
- d. Society 4.0 Digital-based library with a combination of AI, IoT, Big data, Robotic concepts.
- e. Society 5.0 Libraries rely on technological and human developments as their controlling components.

The library is the most dynamic organization because of its inherent for continuous growth in various facets that includes technological development. Evidence of the impact of technological developments include the emergence of digital libraries (mobile libraries), self-service (library self-service users), digital consulting services, information consulting services, and libraries that are more open and dynamic. The library in the concept of society 5.0 can be said to be a library that is a blend of virtual space and physical space so that it is interesting that libraries not only provide rooms and places where users obtain information but also provide digital contexts and digital communication to library users.



The behaviour of acquiring knowledge significantly varies as generations evolve, particularly the Z and alpha generations. The generation that is known for quick and comfortable services will emerge in the future, these includes the “Gamma and the Beta Generation, the next generations”. Potential shifts in this generation's information-seeking habits will also affect their behaviour. If we take a look at the present generation in a number of industrialised nations, we will see how numerous children are not only learning to read but also listening to voices while reading.



Figure 1: Reading and Listening Figure

Source: <https://chalkacademy.com/luka-reading-robot-chinese-books-kids/>

From the given visual, we can see how reading habits are developed early in life, not only in the context of children reading using books, but also in the context of listening to picture books while reading them. These gadgets have been used in China, where pupils enjoy reading exercises beginning with image storybooks at a young age, and read books based on stories or narration they hear with these gadgets. It is understood that children’s reading behaviour will change based on the technological development. Reading is the ability to organize subskills which includes the ability to independently decode print and interpret or understand print; it is the print-to-speech translation process that results in understanding of the text (Wolf, 2016). With this we see that reading from an early age will make it easier for children to start understanding texts later. So that reading with the help of sound will boost reading interest in the future and enhance the children’s text comprehension from the early age.

The development of libraries with the introduction of various technologies by the library management will improve library services, and makes the librarian’s work easier. The deployment of technology is known to improve services (Adebayo, et al., 2018), so that librarians and library managers can focus on other activities. Technology has provided systems to automate routine tasks in factories, offices, libraries and homes (Martinez-Martin et al., 2019). Several library developments that can be developed and felt for society 5.0 include:

Robotics in Libraries

The presence of technology helps humans to more easily and quickly carry out work,

especially those related to the physical (Potočan et al., 2021). Robotics in libraries is not a new concept that is found in several developed countries. The library uses Robotic devices to assist activities in grouping books on the library shelves. The presence of Robotics allows librarians/library staff to avoid tedious and time-consuming tasks such as detecting book movements, returning books to their shelves, finding books lying around, or helping borrowers find their books so they can spend time doing more complicated tasks (Vlachos et al. al., 2020). Robots also make it possible to report collections that are misplaced on shelves and can provide reports to staff officers or librarians (Liau, 2019). The presence of robotics in this case does not replace the position of a librarian but can facilitate the duties of librarians and librarian managers.



Figure 2. Illustration of Robotic Use in Library Material ShelvingSumber:

<https://www.youtube.com/watch?v=sdcq4H-qQhE>.



Figure 3. Illustration of a book scanner

The use of this tool will greatly assist librarians in shelving activities. It can be analogized if every day around 1,000 books come out of the shelves, then in 28 working days

there will be 28,000 books compiled. So this robotic role will be very helpful

Self-Service

Self-service technology offers users freedom and supports library sustainability ([Hutchinson, 2020](#)). Self-service services assist the duties of librarians and libraries in library activities where in this service library users can borrow, return and extend books without meeting the librarian. This self-service service is known as a library service using RFID technology. RFID technology helps inefficient collection, management and distribution of books. This RFID will be very helpful, especially in saving time in circulation activities ([Malipati et al., 2020](#)). This will really help librarians in focusing on other activities. This service will also help users, especially in society 5.0 where users in this generation are people who want convenience and speed in obtaining information.

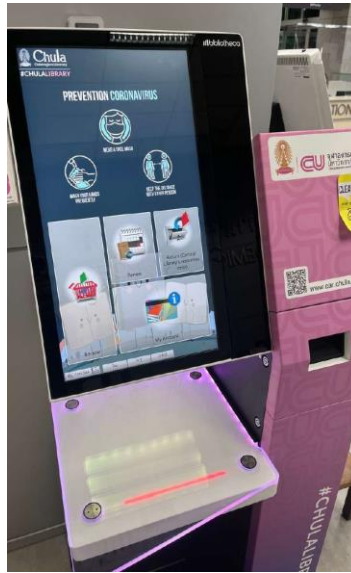


Figure 4. Illustration of Self-Service

Source: Chula Library

Digital Library

Digital Libraries are currently the most ideal solution in the development of society 5.0, especially for Generation Z. This is because they feel comfortable using electronic-based information. These generations also have various electronic devices that make it easy to access this information so that digital libraries are indeed appropriate to be developed in various types of libraries. However, digital libraries are not just a substitute for collections, they are substitutes for documents, but they are actual digital objects such as images, text, etc. ([Trivedi, 2019](#)). Through the digital library, users can read and access digital content information. And the role of the library in a digital library is that the library collects this various information so that later it becomes information that can meet the needs of its users and become knowledge for users.

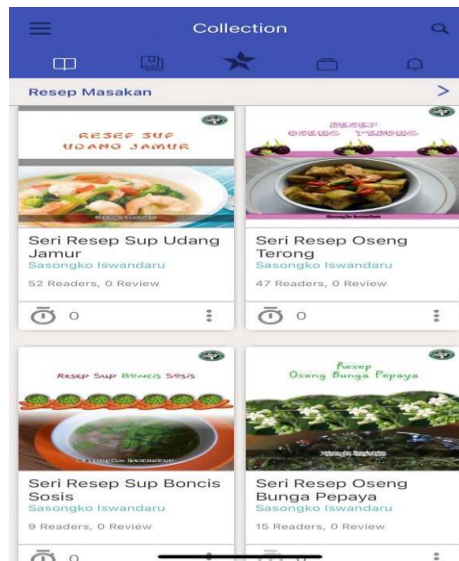


Figure 5. Image of Ipusnas mobile library

Source: Ipusnas.

The picture above is one form of digital library development in the form of a mobile library. Currently, libraries have implemented this concept extensively, where, apart from the library having a collection of printed forms, they also have a collection of books in digital form. Libraries buy these collections and their systems to be accessed by libraries. This mobile library will be in great demand by Generation Z library users because they will feel comfortable using their mobile devices in reading collections. Based on social phenomena that have emerged, many generations have read digital books, especially collections of fiction.

Information Consulting Services

Information consulting services are appropriate services to be developed in libraries in society 5.0 because there are many sources of information that exist around the community and the public must choose the right one and be accounted for. Librarians play a major role in providing information services where they will act as user information consultants. Librarians must know what information best suits their users. This profession must also be prepared to answer questions from user needs. If we often hear that Google will answer all the information problems needed by information seekers, the librarian will direct users to obtain the most appropriate and appropriate information. Librarians as information consultants may be familiar in libraries that were previously known as reference librarians or reference librarians. In virtual reference services, librarians can reach out and provide research assistance to users when they need them regardless of time and location (Yang & Dalal, 2015). The librarian plays a role in providing references and information needed by library users. In developed and developing countries, information consultants in libraries are tasked with assisting clients in their research fields. Researchers will be greatly assisted in finding references that support their research and profession as researchers. Information consulting services are also often referred to as information services. In addition to providing information, information consultants also help provide independence to users so that later users can find the information that best suits their information needs.



Figure 6. Illustration of Librarians in Society 5.0 Era

Source: <https://perpustakaan.fk.ui.ac.id/>

Digital Consulting Services

Digital consulting services are consulting services that might be currently interesting to develop in libraries. This is due to technological developments that cause people to want convenience without looking at each other or meeting face-to-face with physical information. Digital consulting services are such as services that can be accessed by users remotely where users can still communicate and ask librarians through online applications. Libraries can also create a special platform for digital consulting services that can be used to access various questions of information needed by users. On this platform, users can ask for the information they need ([Samosir, 2021](#))

Open Space

The open space referred to here is that the library must follow the tastes and conditions of society that are currently developing and the pattern of life of a developing community. In society 5.0, users have many choices in their activities. Libraries must be able to provide space services that suit their needs. A library cannot be a closed physical building. The library must be dynamic by providing convenience to its users. So that the library becomes a combination of virtual and physical spaces in the concept of society 5.0. This type of public library is the most ideal library in providing open space to the public.

Professional Librarians in the Era of Society 5.0

Library professionals are active actors in the information society and professional identity is influenced by social and cultural phenomena and technological changes ([Widén & Kronqvist-Berg, 2014](#)). Computer technology has drastically influenced library philosophy and practice, so the concept of librarianship and practice has changed considerably ([Einasto, 2019](#)). So that in the librarian profession this also influences the face of the new librarian. Librarian is a profession that works in the field of library and information. The librarian profession is obtained through education. Librarians as information managers, knowledge keepers and information disseminators with libraries as information warehouses and knowledge houses are strategically important in the realization of every development agenda in any part of the world ([Onwubiko, 2021](#)). Library professionals must be prepared to help these customers find their sources of news and entertainment in online and digital formats ([King, 2018](#); [Shashikumar et](#)

[al., 2019](#)). Please note that becoming a librarian is a life choice. A librarian is a profession that not everyone is willing and able to run. Therefore, it takes a strong intention and commitment to pursue the profession. Librarians are required to have the habit of reading and writing, as a form of self-development in the field of literacy culture for librarians and also for library users. This needs to be done because the users are like to be always struggling and wallowing in the various collections of the library. The current library collection is not only in a physical context but also in a digital context. Therefore, a librarian must at least have the habit of reading and writing for the enrichment of various languages and knowledge at any time.

Librarians must be able and ready to be asked to share with users who are inside or outside the library. Therefore, a librarian who is reliable and professional must be willing to change and also change the conditions in his environment. All of that can be done if we are able and have the courage to change our own way of thinking and performance without having to be rewarded because the real motivation to become a librarian is with the intention to change from our own hearts. Library professionals have to work hard to understand the needs and demands of user groups and provide them with opportunities to achieve their targeted goals ([Rani & Bhanu, 2021](#)) There are many ways to become a professional librarian in the era of society 5.0, including having to play an innovative and creative role, as a person who acts as a cog in the development of information; librarians are required to have innovative minds in the sense of being creative so that libraries are able to develop. For example, by making events, talk shows, or seminars in the library. In addition, librarians must have the intention and commitment, namely without having a strong determination it will be difficult to become a librarian. One form of intention can be seen in the effort to learn about the duties and functions of a librarian. Everything must start from the intention, but the intention alone is not enough. It also takes a strong commitment so that in carrying out the work it is not half-hearted. Not many people understand that a form of commitment in this case is to serve and provide information to visitors. Apart from that, librarians must have a strong commitment and intention in getting used to reading and writing. These two activities are considered the most difficult, even though they have been taught since school. In fact, writing and reading activities are often considered activities that are very draining of energy and mind. Furthermore, a communicative spirit is needed, meaning that having the ability to communicate is very important in the library field because librarians and users will interact both directly and virtually. This results in that librarians must be able to have communication skills so that messages or information to be conveyed to users can be fulfilled. In the past, we saw that librarians were very rigid, but now librarians must be more communicative because the users served are millennials who are very communicative and more open.

Another aspect that is no less important is when we talk about visuals, which are often defined by appearance. This is a term we often hear in the service sector. The library is also engaged in the service sector so librarians must be able to look good so that library users feel happy. Attractive visuals depict someone who is unpretentious and friendly to their users. The last is collaboration, a synergy that must be owned by a librarian today. Librarians must be able to build cooperation with other parties to develop libraries. Building this network can be with agencies, communities and other parties who can develop libraries. Currently there are many sectors that can be done in collaboration. Some sectors use people who are influential in a field. This will attract the attention of the public to use the information services provided by the library. For example, influential influencers in the fields of education and knowledge. This will assist the library in marketing information services to library users.



Conclusion

The limitation in this paper is that there are not many writings that look objectively at the existence of libraries and libraries in the era of society 5.0. Libraries in welcoming the era of society 5.0 are undergoing a transformation which is a combination of physical and virtual space. Libraries and libraries must be prepared to face these developments. Libraries and librarians will never be lost in carrying out activities in the management and dissemination of information. Technological developments will assist libraries and librarians in managing libraries so that librarians can focus on other work in managing information and knowledge in the library. Library developments that can be developed and felt for the era of society 5.0 are robotics in libraries, self-service services, digital libraries, information consulting services, and digital consulting services. In the development of the era of society 5.0, librarians are expected to be able to have professionalism in carrying out their profession, namely librarians must be innovative, have intention and commitment, be communicative, literate, visual and collaborative. Librarians and libraries will not disappear, but libraries will still exist and have greater responsibility in management. The author hopes that there will be further research regarding library readiness in welcoming society 5.0. It is hoped that this paper can provide a new perspective on the role of librarians in the information society 5.0

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Conflict of Interest

All authors have no conflict of interest related to this study.

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