Redefining The Five Laws of Library Science in the Digital Age

Moh. Safii
Departement of Library Science
Universitas Negeri Malang
Malang, Indonesia
moh.safii@um.ac.id

Abstract—**SR Ranganathan in 1931 proposed a theory called The Five laws of library science. This theory became a foundation for the world of librarianship and influenced the library science. The emerges of technology in life made it necessary to redefine the five laws of librarianship. This research aims to describe how the theory is applied and in which part is not relevant and needs to be redefined for the sake of library progress. This research used a literature review by reading the original book entitled *The Five Laws of Library Science* by SR Ranganathan and compiled the five laws with the characteristic of Generation Z to be able to get new laws that fit this era The main findings of this research are (1) information: Focus on Content, not Container, (2) user Engagement, (3) Quantitative Analysis of Information, (4) learning Common (Online and Offline).**

Keywords— *librarianship, library science, information science*

I. INTRODUCTION

Something that is commonly known at the beginning of the course in library and information science is the introduction of five laws of library science made by Shiyali Ramamrita Ranganathan, the father of library science in India and whose contributions have worldwide influences. The law was written in a book entitled *The Five Laws of Library Science* in 1931. The first law was (1) Books are for use; (2) Every person has his or her book; (3) Every book its reader; (4) Save the time of the reader; (5) Library is a growing organism. The background of the five laws arises was the spirit to strengthen the role of the library in the learning community. In accordance with the conditions of that time, reading was an activity that would open mind and widened the horizon. In that year not everyone could have a book so that the role of book was taken over by the library as the institution. In his book, SR Ranganathan stated how to attract as many people as possible to come to the library, how all the facilities in the library could be utilized and how books in the library were able to meet their needs/curiosities and how libraries as organizations carried out their duties and obligations and also their roles.

The Five Laws of Library Science emerged due to the conditions of the society at that time when reading was an activity to improve people's living standards and alleviate society from illiteracy. Therefore, the roles of the library were required to be more optimal. The five laws of Library Science of

Ranganathan has a big influence on the field of library science, where the library mindsets are books and all studies related to books and libraries as a place.

Previous research states that the field of research in library science is periodically sequential, newspaper, e-resources, archive materials, repositories [1]. Studies of libraries as buildings and books (collection development) are still interesting as the field of research.

In the digital era, whose generation is called Generation Z with their various characteristics, of course, the five laws of library science need to be redefined with the same spirit when the law was formulated. This article will redefine the five laws of library science in accordance with the evolution of technology in the digital era so that the result of this research become the center of the library's emphasis.

II. METHODS

This research used literature review as methodology. The literature review has several objectives, namely to show the reader that what has been studied has a connection with the present and to fill the gap between previous and current studies [2]. The use of literature studies only adds to the opinion of researchers and does not make the results of other studies as a result of research [3]. The author reads the original book entitled The Five Laws of Library Science by SR Ranganathan and compiled the five laws with the characteristic of Generation Z to be able to get new laws that fit this era.

III. RESULT AND DISCUSSION

Data investigated from the original book from SR Ranganathan entitled The Five Laws of Library Science, in-depth contained in each law [4]:

1. Books are for use : Library location, collection preservation, librarian including profession, ethic, correlation with the patron, services, psychological aspect.
2. Every person his or her book : libraries for all including man and women, for all society member, library activities for all ages, the library for all different educational background, loan rules,

circulation, reference service and reserve. Making society has full access to the library.

3. Every book its reader : the open/close access system, cataloging, publication e.g new book, collection development, patron participation in the development of library

4. Save the time of the reader : user education, using cataloging rules, the access point

5. Library is a growing organism : library building layout, design library, library space planning, library bookshelf

The author describes the five laws above by identifying entities involved in it, they are patron, library, and book. The three entities are involved in interaction within each other. The interaction created from each entity is represented in figure 1.
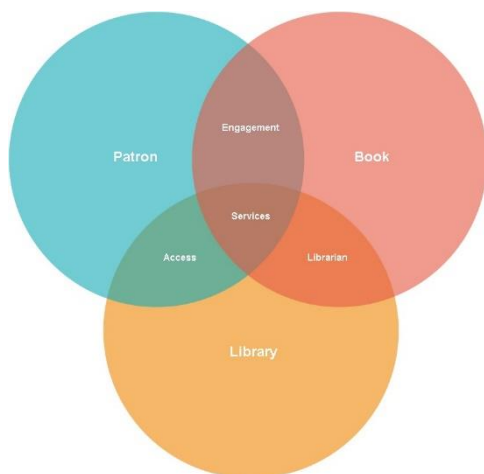

Fig. 1. The Five Laws of Library Science

The Five Laws of Library Science and explanations in the book was a mindset of SR Ranganathan within the context in 1930s era. From figure 1 above, it is very natural that people's perceptions of libraries are a storehouse of books [5].

A. Generation Z

What if The Five Laws of Library Science are placed in the digital world today? It is necessary to know the characteristics of Generation Z [6]:

1. Generation Z lives in a digital or virtual world and the real world (physical)

2. Able to solve problems independently through the internet

3. High adaptability to technology

Almost similar to the opinion above, there are seven characteristics of Generation Z which are [7]:

1. Phigital : Live in the digital world and the physical world (actually). Life in the virtual world is considered the same as the real world, meaning they consider themselves to be the same person as the real world, including identity, hobbies and likes and friendships. Likewise, they even will bring what is in real life into virtual life.

2. Hyper-Custom : able to identify and customize themselves. Also free to choose their own careers even though it's not in accordance with their previous educational background.

3. Realistic : Realistic thinking, looking more at facts and not speculating without careful planning.

4. FOMO : Fear of missing out, have a soul to always be challenged in every condition. Don't want to stop at one life choice but multitasking and stay connected with other.

5. Weconomists : have a social soul where their existence must be able to benefit the wider community, especially in businesses that provide wider benefits also.

6. DIY : Do it Your Self, able to work alone or self-taught only with internet such as watching videos on Youtube or reading on blogs.

7. Driven : formed with a high fighting spirit and able to overcome challenges and be independent

B. Impact of Digital Age to Five Law

Ranganathan's Five Laws of Library Science emerged with a mindset of the 1930s when let alone to read, to survive was still a goal because colonialism and the second world war were still continuing. So it is necessary to analyze how the five laws were adopted in the current digital era.

1) Patron. Patrons in the digital age are not only those who register as members with proof of membership cards, but anyone in the digital age is permitted to access and get library services. Because there is a concept of the digital world and the real world, both must be considered the same, not different in terms of service.

When users are allowed to read in the library, users should visit the web library and also be allowed to read digital collections. Such as scientific work services in libraries, where students can read full-text thesis, so those who open library repositories online are also allowed to read full-text.

In the digital era, a concept that must be embedded is the user-centered library. This concept offers engagement in the library. The more users involved in the library, the stronger the library is needed. Examples of user involvement in the library :

a) Collection management [1]: full participation and feedback from patrons.

b) Support the internet facilities (wifi full access): including providing the student with more space [8] to eliminate bad gaps and perceptions [5].

c) Accommodate real-time communication facilities with patrons such as live chat for reference [9] [10] [11]: The main idea about engaging users makes library becomes "imperative to co-create, rather than dictate value to users" [12]. Conceptual engagement of users in the library can be studied with user studies, user needs (information need) and information seeking behavior (information behavior).

2) Book. Books are part of information products because they contain information for the reader which is then processed into knowledge [6]. In 1930 where The Five Laws of Library

Science above were made, of course, there was no mindset about digital information products at that time such as ebooks, DVD, CD. The characteristics of digital information products are indestructibility, transmutability, and reproducibility. In the concept of books in the digital era, it does not focus on form (container) but on content. So that in the digital era, the word 'book' cannot be the characteristic of the library but 'information' is the right word because information products are not just books.

3) Library. Library in the present era with the disruption of technology into the library changes people's mindset about the library building, where all can be accessed digitally, So the focus of library management is not on how to expand the library but how to use the library to be as comfortable as possible for those who visit the library directly [9]. Library changes in the digital era made the way how to access information to be different [5]. At first, they borrowed books which can be read in the library or taken home, but now they will access all of that digitally. So it is necessary to provide a place for patrons in the library so that they are comfortable in accessing library collections or maybe making discussion with peers, this is called learning common.

Learning common is a physical place, part of library building that is intentionally provided to users solely for the needs of research, work activities for college assignments with the aim of user engagement through collaboration, experimentation, and exploration between users and librarians [13] [14].

An important benefit of learning common is one of the right methods for library promotion [15]. In the mindset of library development, there should be no difference between libraries in the real and digital world. If there are librarians who can be invited to communicate in the library building, then there should be librarians who can be invited to communicate online. The same thing, for example, if they are provided with learning common in the library, learning should also be provided in digitaly too.

C. The Five Laws of Library Science in Digital Era

After elaborating on the changes in The Five Laws of Library Science and 21st-century characteristics, the following are the results of the redefinition of Five Laws of Library Science:

TABLE 1. REDEFINE FIVE LAW

Five Laws	Redefine
Books are for use	Information : Focus On Content, not Container
Every person his or her book	User Engagement
Every book its reader	
Save the time of the reader	Quantitative Analysis of Information
Library is a growing organism	Learning Common (Online and Offline)

1) Information : Focus On Content not Container. Information is power [4]. Someone who has access to

information and has the ability to transform it into knowledge is the same as having power. Users in the digital age do not care about the form of information but the essence of information itself is important. Because in the digital era, the form of information is not so important to be underlined since a lot of important information is not formally spread through the internet. People mindset about the library still has a strong relationship with the books, it will only consume library resources. Not everyone likes reading printed books but also several of them like to read in digital format. One of the characteristics of generation Z is multitasking, which does not focus on one job, but wants to do several tasks at once, like reading materials online [11].

2) User Engagement. To create user engagement, at the beginning libraries must evaluate user satisfaction. User satisfaction is of high value if the library is in line with their wishes. Expectation arises to the library because they accommodate what users want. So to realize it all, it needs a user-centered study of how they utilize all resources and materials owned by the library. Before doing so, it is necessary to do a prior study about [8]:

a) System effectiveness: Use of Information Retrieval System to fulfill user needs.

b) User effectiveness: Accuracy and completeness provided by the system from what is desired by the user.

c) User effort: User interaction in the context of information searching behavior with Information Retrieval System method.

d) User characteristic*:* Librarian conduct user studies to involve in process.

3) Quantitative Analysis of Information. In the digital era, a quantitative measurement is important because the nature of Generation Z is always think rationally. Seeing the facts that they are focusing on data and numbers will strengthen the information itself. In the study of libraries and information science, quantitative analysis can be in the form of bibliometric, altimetric, scientometric.

4) Learning Common (Online and Offline). Another characteristic of Generation Z is that they prefer to work in teams, like interactions and ways of learning according to their wishes. The library must take this role so that a library becomes a place to find information. A library is a place for them to do college assignments also research. On the digital side, a digital library must have the same function. This means that the library provides the same service to its users when online.

IV. CONCLUSION

The Five Laws of Library Science of Ranganathan was made according to the background at the time it was made. The absence of technology certainly has the characteristics of different patrons. The results of this research study show that Five Laws of Library Science of Ranganathan have been redefined to 4 things, namely (1) information: focus on the content, not the container; (2) user engagement (3) Quantitative

Analysis of Information and (4) Common Learning (Online and Offline)

REFERENCES

[1] Kawalec, Anna. (2013). *Research trends in library and information science based Spanish scientific publication 2000 to 2010.* Malaysian Journal of Library & Information Science, Vol. 18, no 2 : 1-13

[2] Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches*.

[3] Connaway, L. S., Radford, M. L., & Powell, R. R. (2016). *Research Methods in Library and Information Science, 6th Edition*. Oxford: Pearson Education.

[4] Ranganathan, SR.(1931). The Five Laws of Library Science. New Delhi: Madras Library Association

[5] Van, D. W., & Mosley, P. A. (2012). *Challenge of Library Management: Leading with Emotional Engagement*. American Library Association.

[6] Seemiller, C., & Grace, M. (2016). *Generation Z goes to college*. San Francisco, CA : Jossey-Bass

[7] GlobalStillman, D., & Stillman, J. (2017). *Gen Z @ Work: How the next generation is transforming the workplace*. New York : HarperCollins Publisher

[8] Snavely, L. (2012). *Student engagement and the academic library*. Santa Barbara, Calif: Libraries Unlimited, an imprint of ABC-CLIO, LLC.

[9] Sanborn, L. (2017). *Gender issues and the library: Case studies of innovative programs and resources*. New Jersey : Mc Farland

[10] Nicholson, K. (2017). *Innovation in public libraries: Learning from international library practice*. Cambridge, MA : Chandos Publishing

[11] Rendina, D. L. (2017). *Reimagining library spaces: Transform your space on any budget*. Portland, Oregon : International Society for Technology in Education.

[12] Miller, Laura Newton. (2018). University Community Engagement and the Strategic Planning Process. *Evidence Based Library and Information Practice*,13(1), 4-17.

[13] Schader, B. (2008). *Learning commons: Evolution and collaborative essentials*. Oxford: Chandos.

[14] Sykes, J. A. (2016). *The whole school library learning commons: An educator's guide*. Santa Barbara, CA : Libraries Unlimited

[15] Lackie, R. J., & In Wood, M. S. (2015). *Creative library marketing and publicity: Best practices*. Lanham: Rowman & Littlefield.

[16] Hart, A. (2006). *A Strategy for the Management of Digital Information*