THE EFFECTS OF THE USE OF AUTOMATIC BOOK TRANSPORTATION (*TELELIFT*) AND THE QUALITY OF LIBRARIAN SERVICES ON USER LOYALTY BY MEDIATING USER SATISFACTION IN CLOSED MONOGRAPH SERVICES OF THE NATIONAL LIBRARY OF THE REPUBLIC OF INDONESIA

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ABSTRACT

The National Library of Indonesia is a non-ministerial government institution that provides printed and recorded works for public interest. It functions as a supervisory, reference, deposit, research, and preservation library and is domiciled in Jakarta. The library has installed a Telelift to reduce workload and prevent book damage, saving time and enhancing the library's image. However, network disruptions, lack of technicians, and limited support for closed monograft services can disrupt service. These issues negatively impact user satisfaction, as shown in the user satisfaction study report, which decreased from 3.76 to 3.53 in 2020-2022. This paper aims to discuss the effect of the use of automatic book transportation (Telelift) and the quality of librarian services on user loyalty by mediating user satisfaction with closed monograph services of the National Library of Indonesia.

KeyWords
Conceptual Model, Telelift, Quality of Librarian Services, User Loyalty, User Satisfaction.

INTRODUCTION

A nation's wealth is its deep mastery of science and technology, which requires reading and writing skills. To encourage interest in reading, the government should provide a library that houses a complete collection of written and recorded works, accessible through purchases, exchanges, and grants, fostering satisfaction and progress in the nation.

The National Library of Indonesia is a non-ministerial government institution that provides printed and recorded works for public interest. It functions as a supervisory, reference, deposit, research, and preservation library, and is domiciled in Jakarta. Collections come from purchases, exchanges, grants, and Law Number 13 of 2018 concerning Handover of Printed Works and Record Works.

As of December 2022, the Closed Monograph Service has 173,843 titles and 179,398 copies. Users must order collections through an online catalog or OPAC. The National Library of Indonesia has installed a *telelift* to reduce workload and prevent book damage, saving time and enhancing the library's image. *Telelift* technology can improve librarian service by allowing quick response times and polite communication. However, issues like network disruptions, lack of technicians, and limited support for closed monograft services can disrupt service. These issues negatively impact user satisfaction, as shown in the User Satisfaction Study Report, which decreased from 3.76 to 3.53 in 2020-2022.

Based on the background and issues mentioned above, this conceptual paper will discuss the effect of the use of automatic book transportation (*telelift*) and the quality of librarian services on user loyalty by mediating user satisfaction in closed monograph services of the National Library of the republic of Indonesia.

LITERATURE REVIEW

A. Automatic Book Transportation (*Telelift*)

A Telelift is an automated transportation system or device used to transport and deliver materials or goods, such as books, from one location to another in a library or similar facility (Telelift GmbH, n.d.). Telelift develops and produces a rail-bound conveying system for transporting up to 50 kg in buildings and production plants. The unique character of all systems is three-dimensional traffic routing. About 500 systems have been installed in hospitals, increased hygiene standards significantly, and dropped the number of lower-educated transportation staff. Other markets are libraries with 250,000 books, administration buildings with security demand, and industry applications (automotive and food industries).

Fully automated book transport systems connect quickly between the repositories, open-access areas, drop-off, check-out, and reading rooms. Telelift offers individually adjustable systems – for collective and individual book transports alike. They can additionally be equipped with an automated loading and unloading function. Telelift systems are economical and save time. They free up library staff and increase the availability of the book inventory for the users.

From the description above, it can be synthesized that the automatic book transportation (Telelift) is a fully functional automatic book transportation tool that serves quickly between the warehouse (book storage) to the reading room, open access area, book drop-off, and book checkpoint. According to Telelift GmbH, n.d., with indicators:

1) Collection safety and durability
2) Safety and comfort of users
3) Ease of borrowing and repayment
4) Service efficiency

B. Librarian Service Quality

Librarian service quality is the librarian's effort to meet the needs and desires of users by ensuring the level of accuracy and suitability in providing services to meet user expectations (Tjiptono, 2007). Service quality is a crucial characteristic of competition between organizations, determining an organization's success and creating a competitive advantage. It is based on the difference between customers' perceptions and expectations of customer services. Service quality plays a crucial role in organizations' success, increasing their competitive power (Gronroos opinion (1998). This means that if the quality of servants is better than competitors, an organization will excel in competition.

The distinction between customer satisfaction and service quality is considered an important issue for managers, and service providers need to provide high-quality services to meet customer satisfaction as their business objectives. Service quality has been studied across various fields, including banking, education, credit card companies, and telecommunications (Hernon et al., 1999). The topic of library service quality was researched rigorously by Martensen and Gronholdt (2003), who found that electronic resources, collection books or publications, technical facilities, library staff, and the library environment are the key determinants in a library context.

A study by Kurniawan et al. (2021) at the Regional Public Library of Probolinggo Regency investigated the impact of library automation, employee competence, and service quality on visitor satisfaction. Good interaction and assistance librarians provide can increase visitor satisfaction, positively affecting their experience in the library.

According to (Hernon et al., 1999), from several expert opinions that have been described earlier, it can be synthesized that the quality of librarian service is the quality of services provided by librarians with indicators:

1) Fast and precise in responding to user needs
2) The ability of librarians to provide services that are to the needs of users
3) The friendly and polite attitude of librarians
4) Librarians ability to communicate with users
5) The time it takes for users to get the service
6) Availability of adequate Wi-Fi facilities

C. User Loyalty

After consumers use products or services, consumers will consume and feel what is felt after consuming the product or service purchased. User loyalty is a mental state in which users consistently have a solid emotional bond with the library as a service provider. This can result in long-lasting and deep relationships.

Risparyanto's 2017 study highlights the role of user satisfaction as a mediator in the relationship between librarian service quality and user loyalty, indicating that better service quality leads to higher satisfaction levels. Research by Rosyidah and Andjarwati (2021) and research by Rachmawati and Syarif (2021) emphasized that the quality of self-service technology and user satisfaction levels play an essential role in linking the use of these technologies with user loyalty. Furthermore, the research findings by Risparyanto (2017) indicate that the high quality of service from librarians can increase user satisfaction, ultimately increasing user loyalty to libraries.

According to Blackwell et al. (2006:203), in Wier, Tun Ganyang (2019), ideally, companies want their products to provide as many benefits/satisfaction as possible so that consumers will make repeat purchases. However, the experience of consuming a product sometimes fails to meet consumer expectations, meaning it does not provide satisfaction. So, consumer satisfaction will affect whether consumers purchase products from the same company.

According to Yuda Wicaksana in Pratiwi, 2010, user loyalty consists of several indicators as follows:

1) Users make repeat visits
2) Users are consistent with the place of visit
3) Users refer others to visit the same place
4) Users are not easily influenced or attracted to other libraries to visit

D. User Satisfaction

User satisfaction is a situation that occurs when users realize that library services have met their needs and expectations well under the expectations they have (Tjiptono, 2012). User satisfaction is considered an essential element mediating the relationship between the use of automatic book transportation (Telelift), the quality of librarian service, and user loyalty. In other words, user satisfaction is expected to be a central factor that links the influence of automatic book transportation (Telelift) and the quality of librarian service with user loyalty. Customer satisfaction is the fulfillment of customer expectations and perceived performance of the products purchased. If the perceived performance exceeds expectations, the customer will be satisfied. However, the customer will feel dissatisfied if it is the other way around.

Literature review suggests that Satisfaction is achieved from two parallel processes: emotional and normative (Robinot & Giannelloni, 2010). If the result of the emotional process is greater than the result of the normative process, then it will be said to be satisfied. Total Quality Management (TQM) is an approach to running a business that maximizes the organization's competitiveness by continuously improving its products, services, people, processes, and environment. Customer Satisfaction Measurement Methods:

• Direct measurement: Asking respondents to rate their expectations and feelings towards a specific attribute.
• Observation: Recording problems and suggestions about the company's offerings.
• Ranking: Ranking elements of the offer based on their importance and company performance.

According to Blackwell et al. (2006:222), consumer satisfaction factors include the performance of products or services, feelings of consuming products or services, and consumer expectations towards products or services in meeting their needs. Service quality represents a customer's perception from five dimensions of service, while Satisfaction is more pervasive and includes quality of service, product quality, price, and

also situational factors and personal factors (Seyed Javadin, 2009).

Firma & Rahmah (2012) stated that Some factors affect user satisfaction, namely:

1) Speed and accuracy in providing services
2) Willingness to help and meet the needs of users
3) Librarian's ability and friendliness
4) Availability and ease of access to information
5) Comfort and aesthetics of the service environment

CONCEPTUAL MODEL

By taking the literature review and previous studies into consideration, it is suspected that variables such as automatic book transportation (*Telelift*) and librarian service quality have direct effects on user satisfaction and user loyalty. It is also suspected that automatic book transportation (*Telelift*) and librarian service quality have indirect effects on user loyalty, which are mediated by user satisfaction. Therefore, this paper can formulate a conceptual model pictured in figure 1 below.
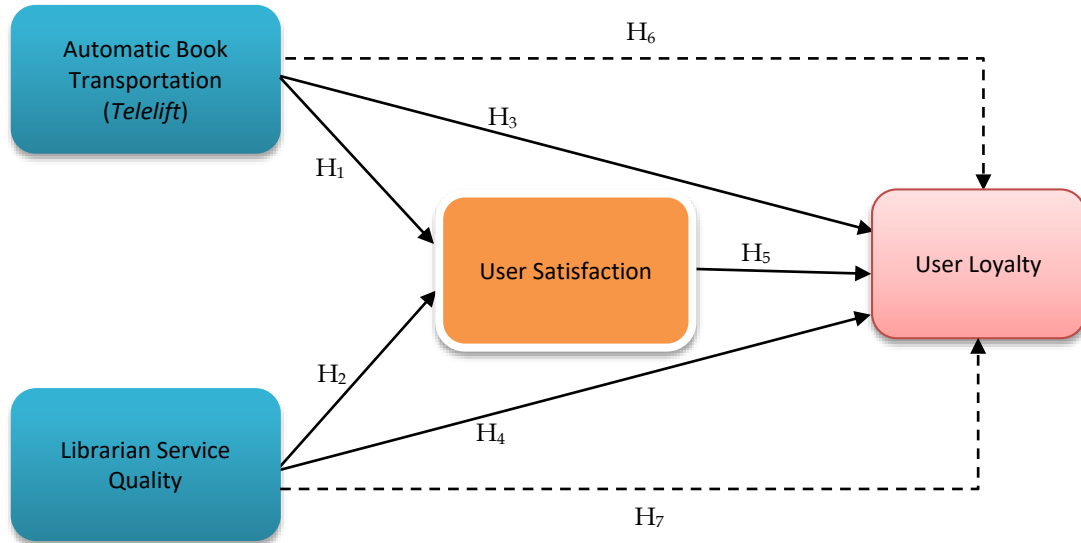
Figure 1. The Conceptual Model

Description:

———▶ : Direct Effect

- - - - -▶ : Indirect Effect (Mediated)

HYPOTHESIS DEVELOPMENT

The researchers developed this research by analyzing the phenomena between the variables studied to produce hypotheses. The following is a study that confirms that variables automatic book transportation tools (*Telelift*) and librarian service quality are thought to influence user satisfaction and have an indirect effect on user loyalty. Based on the conceptual model in Figure 1, seven hypotheses were developed as follows:

H1: *Telelift* directly has a positive and significant effect on User Satisfaction.

H2: Librarian Service Quality directly has a positive and significant effect on User Satisfaction.

H3: User Satisfaction directly has a positive and significant effect on User Loyalty.

H4: *Telelift* directly has a positive and significant effect on User Loyalty.

H5: Librarian Service Quality directly has a positive and significant effect on User Loyalty.

H6: User Satisfaction acts as a variable that mediates the relationship between *Telelift* and User Loyalty.

H7: User Satisfaction acts as a variable that mediates the relationship between Librarian Service Quality and User Loyalty.

METHODOLOGY

The method of this study is quantitative and will be conducted to investigate the relationship between Telelift and librarian service quality and user loyalty by including user satisfaction as an intermediary element. The population of this study is users in the Closed Monograph Service Group of the National Library of the Republic of Indonesia, with an unlimited number. The sample in this study is users who have become members of the National Library of the Republic of Indonesia who have become members totaling 150 (one hundred fifty-five) people.

Data collection will be done using a 5-point Likert scale questionnaire. This research will be tested for validity, reliability, and path analysis assumptions using SPSS software, and the results will be analyzed using path analysis and the same software.

CONCLUSION

This paper aims to develop a conceptual model to investigate the effects of automatic book transportation (Telelift) and librarian service quality on user loyalty by using user satisfaction as an intervening or mediator variable. This conceptual paper consists of a research background, literature review, conceptual model, hypotheses, and research methodology of the user loyalty problem in the closed monograph service group of the National Library of the Republic of Indonesia. By using user satisfaction as a mediator, the application of this study can reveal information on the relationship between Telelift and librarian service quality on user loyalty.

REFERENCES

[1]   Blackwell, R. D., et al. (2006). Consumer Behavior. Mason: Thomson Higher Education.

[2]   Firma, A. & Rahmah, E. (2012). Faktor-Faktor Yang Mempengaruhi Kepuasan Pemustaka di Perpustakaan Kopertis Wilayah X. Jurnal Pemasaran, 1(4).

[3]   Gorst, J., et al. (1998). Providing customer satisfaction. Total Quality Management, 9(4&5), 100–103.

[4]   Gronroos, C., Heinonen, F., Isoniemi, K., & Lindholm, M. (2000). The net-offer model: a case example from the virtual marketplace. Management Decision, 38(4), 243-52.

[5]   Hernon, P., Nitecki, D. A., & Altman, E. (1999). Service quality and customer satisfaction: An assessment and future directions. The Journal of Academic Librarianship, 25(1), 9-17.

[6]   Hosseini, M. H., Ahmadi Nejad, M., & Ghaderi, S. (2010). Review and assess Service quality and its relationship with customer satisfaction: A Case Study of Tejarat Banks. Business Studies, 42, 88-97.

[7]   Kurniawan, Y., Buchori, M., & Pradiani, T. (2021). Pengaruh Pemanfaatan Otomasi Perpustakaan, Kompetensi Pegawai dan Kualitas Layanan Terhadap Kepuasan Pemustaka pada Perpustakaan Umum Daerah Kabupaten Probolinggo.

[8]   Kurniawan, Y., Buchori, M., & Pradiani, T. (2021). Pengaruh Pemanfaatan Otomasi Perpustakaan, Kompetensi Pegawai dan Kualitas Layanan Terhadap Kepuasan Pemustaka pada Perpustakaan Umum Daerah Kabupaten Probolinggo.

[9]   Lawe, Listiani, et al. (2016). Peran Fasilitas Perpustakaan Terhadap Kinerja Pustakawan Di Badan Perpustakaan Arsip Dan Dokumentasi Provinsi Sulawesi Utara. Acta Diurna, 5(3)

[10] Martensen, A., & Grønholdt, L. (2003). Improving library users' perceived quality, satisfaction and loyalty: an integrated measurement and management system. The Journal of Academic Librarianship, 29(3), 140-147.

[11] Pratiwi, D. I. (2010). Analisis Pengaruh Harapan Pelanggan, Kualitas Produk, Kepuasan Pelanggan Terhadap Loyalitas Pelanggan Internet Flash Unlimited di Semarang. Universitas Diponegoro Semarang.

[12] Rachmawati, A. N., & Syarif, V. D. (2021). MANAJEMEN PERPUSTAKAAN BERBASIS IT-BASED SELF SERVICE PADA PERPUSTAKAAN PERGURUAN TINGGI (STUDI KASUS: STIE TRI BHAKTI). JURNAL KEWIRAUSAHAAN, AKUNTANSI DAN MANAJEMEN TRI BISNIS.

[13] Risparyanto, A. (2017). Pengaruh Kualitas Layanan Pustakawan Terhadap Loyalitas Pemustaka dengan Variabel Intervening Kepuasan Pemustaka.

[14] Robinot, E., & Giannelloni, L. (2010). Do hotels' "green" attributes contribute to customer satisfaction? Journal of Services Marketing, 24(2), 157-169.

[15] Rosyidah, N. D., & Andjarwati, A. L. (2021). PENGARUH SELF-SERVICE TECHNOLOGY QUALITY TERHADAP LOYALITAS DENGAN KEPUASAN SEBAGAI VARIABEL MEDIASI (STUDI PADA PELANGGAN MCDONALD'S DI SURABAYA). Image: Jurnal Riset Manajemen.

[16] Santos, J. (2003). "E-service quality: a model of virtual service dimensions." Managing Service Quality, 13(3), 233-47.

[17] Seyed Javadin,S.R;Sedghi,A;Matlebi,D;Hosseini,S.J;Yazdani,H.R.(2009). A comparative study indicator of customer satisfaction and providing a model for measuring satisfaction of taxpayers State Tax Organization, Journal of Business Management, Volume 1, Issue 2, pp. 101-118.

[18] Telelift, Overview Handling 21xx, Overview Business Profile.

[19] Tjiptono. (2005). Brand Management and Strategy. Yogyakarta: Andi.

[20] Tjiptono. (2012). Strategi Pemasaran. Yogyakarta: Andi.