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DEVELOPMENT OF A WEBSITE-BASED GROUP VISIT RESERVATION SERVICE AT THE DEPARTMENT OF ARCHIVES AND LIBRARY OF MAGETAN REGENCY

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Abstract
This study aims to develop a website-based group visit reservation service for public libraries using the Waterfall development model, consisting of analysis, design, implementation, testing, and maintenance stages, in order to address inefficiencies and scheduling conflicts caused by manual reservation systems. The system was developed using Laravel, PHP, and MySQL, and evaluated through expert validation and field testing involving 15 respondents, resulting in scores of 95% for media validation, 88% for material validation, and 96% for field testing, all categorized as "very feasible." Beyond its local implementation, this study highlights the practical significance of the system in supporting digital transformation in public libraries by improving service efficiency, enabling real-time scheduling, and enhancing user accessibility. Furthermore, the integration of features such as online booking, automated confirmation, and reminder notifications demonstrates a contribution to the development of more systematic, transparent, and technology-driven library services
Keywords: Reservation, Group Visits, Website, Public Library

INTRODUCTION

As an information provision center, libraries play a vital role in fulfilling users' information needs, which continue to develop in line with advancements in science and technology. Beyond their function as repositories of information, libraries also serve as conducive and engaging environments, as they are able to offer both educational and recreational experiences to their users (Iztihana & Arfa, 2020). The availability of various supporting facilities, such as comfortable reading rooms, comprehensive collections, and interactive service areas, positions libraries as appealing destinations for enhancing knowledge and gaining new learning experiences. In this regard, libraries also organize a range of programs and activities designed to attract visitors from diverse demographic groups (Sari, 2020). To accommodate organized activities and high-volume visits, libraries provide group visit reservation services. Through this service, visitors are able to schedule visits in accordance with available capacity, thereby ensuring that visits are conducted in a planned, efficient, and systematic manner (Kirana and Narendra 2023).

According to Rismayeti & Eko Noprianto (2025), libraries are classified into several categories, one of which is the public library. One such public library in the Magetan region is

the Department of Archives and Library of Magetan Regency, located at Jl. Basuki Rahmat Barat No. 1, Magetan Regency. This institution offers a variety of services, including children's services and circulation services. Children's services represent one of the primary attractions for visitors, as during visits, children are formally introduced to library facilities and collections under the supervision of a tour guide. Following this introductory session, children participate in structured educational activities, including reading sessions, coloring activities, and storytelling.

Furthermore, for group visits at the junior high school (SMP) and senior high school (SMA) levels, students are similarly accompanied by a tour guide who provides an initial orientation to the library environment. This is followed by activities such as reading and borrowing general collections, as well as the utilization of other facilities provided by the Department of Archives and Library of Magetan Regency. The Department has also established adequate information technology infrastructure to support visitor access. Through these technological facilities, members of the public are able to access various library services using personal devices, either via the official website on computers or through mobile devices (Jannah 2022). To illustrate these conditions, the following section presents data on group visit activities over a one-year period (Siska and Roza 2022).

Based on the statistical data presented above, there are two categories of visit records, namely documented (recorded) visits and undocumented (unrecorded) visits Sutarno NS (2020). Overall, undocumented visits demonstrate a significantly higher frequency compared to documented visits. The high number of undocumented visits is primarily caused by the large proportion of visitors who arrive directly without undergoing a prior reservation process, while the library faces limitations in human resources to manage multiple group visits simultaneously. In addition, the current visit reservation process is conducted using a manual system. This process begins with visitors inquiring about visit requirements, followed by the submission of an official request letter from the head of the relevant institution or school to the library staff. Subsequently, the staff schedules the visit, and visitors must wait for confirmation of the visit schedule, a process that typically takes up to three days. Consequently, this procedure is time-consuming and lacks efficiency.

The manual system currently in use frequently results in scheduling conflicts. Furthermore, visitors who are unfamiliar with the reservation procedures often arrive directly at the Department of Archives and Library of Magetan Regency to conduct visits without prior arrangement. Based on these conditions, an innovation in information technology–based services is required to address the challenges associated with managing group visits. The development of a website-based reservation service represents a relevant solution, as it enables visitors to submit reservation requests online, access clear and comprehensive service information, and obtain certainty regarding visit schedules. On the other hand, a website-based system also assists the library in managing reservation data, monitoring visit schedules, and optimizing the utilization of available resources.

Libraries play a crucial role as information providers and learning centers that continue to evolve alongside technological advancements Bagyono (2006). In the context of digital transformation, public libraries are increasingly required to deliver efficient, accessible, and user-oriented services. Previous studies have highlighted the importance of integrating information technology into library services to improve service quality and user satisfaction (Supriyanto 2007). However, most implementations still focus on general digital services, while specific operational aspects—such as group visit reservation management—remain underdeveloped, particularly in local public libraries. In practice, many public libraries still rely

on manual reservation systems, which often lead to scheduling conflicts, inefficient data management, and limited accessibility for users Elgamar (2020). This issue is evident at the Department of Archives and Library of Magetan Regency, where group visit reservations require administrative procedures that are time-consuming and prone to errors. Although, some studies exist including one conducted by Anharudin & Nasser tahun (2020) research specifically addressing the development of an integrated booking system tailored to the operational needs of public libraries, particularly in managing group visits, remains limited.

Therefore, this study aims to fill this gap by developing a website-based group visit reservation system using the Waterfall model. The novelty of this research lies in the design of a system that not only facilitates online booking but also integrates features such as real-time scheduling, service selection, automated confirmation, and reminder notifications, which are specifically adapted to the workflow of public library services. In addition to addressing local operational challenges, this study contributes to the broader discourse on digital transformation in public libraries by demonstrating how technology can be applied to improve service efficiency, data management, and user experience in a structured and sustainable manner

RESEARCH METHOD

This study employs a Research and Development (R&D) method using the System Development Life Cycle (SDLC) with the Waterfall model. This model was selected due to its systematic and sequential development stages, making it appropriate for the development of a group visit reservation service in which system requirements have been clearly identified from the outset Saravanos & Curinga (2023). The development process begins with a requirements analysis stage, conducted through observation and interviews to identify existing problems and user needs at the Department of Archives and Library of Magetan Regency. This stage is followed by the system design phase, which includes the design of workflow processes, user interface layouts, and database structures Bassil (2012).

This study approach using the System Development Life Cycle (SDLC) with the Waterfall model, consisting of five stages: analysis, design, implementation, testing, and maintenance. The analysis stage was conducted through observation and semi-structured interviews with library staff to identify system requirements and existing problems Kesuma Astuti & Sri Agustina (2022). The design stage involved developing system architecture, user interface prototypes, and database structures, which were then implemented using Laravel, PHP, and MySQL (Mavilinda and Nazaruddin 2022).

The evaluation process combined expert validation and field testing to assess both technical feasibility and user acceptance. Expert validation involved one media expert and one subject matter expert selected based on their professional expertise in information systems and library science Supriyanti (2005). The validation instruments were developed based on established evaluation indicators, including usability, information quality, interaction quality, and service suitability. Although formal statistical reliability testing was not conducted, the instruments were reviewed to ensure content relevance and clarity Sihotang (2021).

Field testing was conducted using purposive sampling, involving 15 respondents who had experience in conducting group visits to the Department of Archives and Library of Magetan Regency (Sugiyono 2019). Data were collected through structured questionnaires to evaluate user experience and system usability. The collected data were analyzed using descriptive

quantitative methods in the form of percentage scores to determine the feasibility level of the developed system.

Ethical considerations were taken into account by ensuring that all participants were informed about the purpose of the study and that their responses were used solely for research purposes. Participation was voluntary, and respondent data were kept confidential (Ariza 2024). While this study primarily relies on descriptive analysis without inferential statistical testing, this approach is considered appropriate for system development research aimed at evaluating product feasibility and usability within a specific institutional context.

The implementation phase involves the development of a reservation website using the Laravel framework, with PHP as the programming language and MySQL as the database management system (Sihotang 2021). Visual Studio Code and Laragon are utilized as the development environment tools. Subsequently, a testing phase is carried out to ensure that all system functionalities operate correctly and in accordance with user requirements. This testing process includes expert validation and field testing. The final stage is maintenance, which focuses on system improvements and refinements based on evaluation results, ensuring that the website-based group visit reservation service can be utilized optimally and sustainably

RESULT AND DISCUSSION

The development research conducted resulted in a product in the form of a group visit reservation website for the Department of Archives and Library of Magetan Regency. The product has undergone validation and field testing stages and has been revised in accordance with feedback provided by validators and respondents. The researcher developed this group visit reservation service website with two user interfaces, namely an administrator interface and a user interface. The following section presents the final product of the group visit reservation service website at the Department of Archives and Library of Magetan Regency.

Product Description

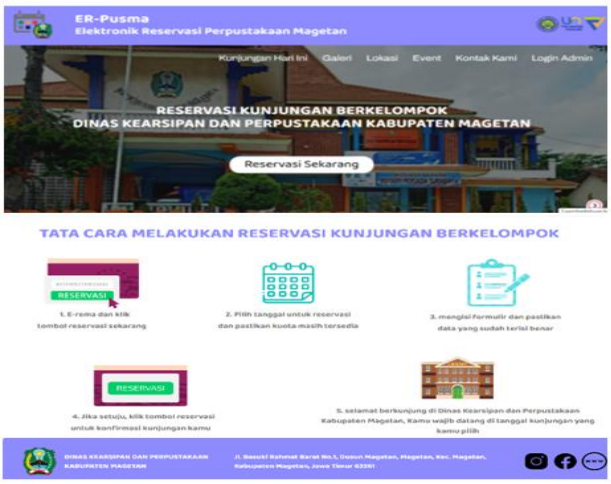
This development study produced a group visit reservation website for the Department of Archives and Library of Magetan Regency. The group visit reservation service website was designed with two distinct user interfaces, namely an administrator interface and a user interface. The following section presents the final version of the group visit reservation website developed for the Department of Archives and Library of Magetan Regency.

Home Page Interface

On the home page interface, the upper right corner displays the product logo and the logo of the Department of Archives and Library of Magetan Regency, which serve as the identity of the developed product. In addition, the website identity, namely ER-Pusma (Electronic Reservation of the Magetan Library), is also presented. Meanwhile, the upper left corner features the institutional logos, consisting of the university logo and the faculty logo, which function as the institutional identity representing the author's academic affiliation.

Several features are available on this page, including Today's Visits, Gallery, Location, Events, Contact Us, and Admin Login. In the central section of the interface, the text "Group Visit Reservation of the Department of Archives and Library of Magetan Regency" is displayed, indicating that the website is specifically designed to facilitate group visit reservations at the Department of Archives and Library of Magetan Regency. Furthermore, a Reserve Now feature

is provided, which, when selected, directs users to the second page of the system. When the page is scrolled downward, information regarding the procedures for making reservations through the website is displayed. In the footer section, the address and name of the Department of Archives and Library of Magetan Regency are presented, along with the social media icons associated with the library.

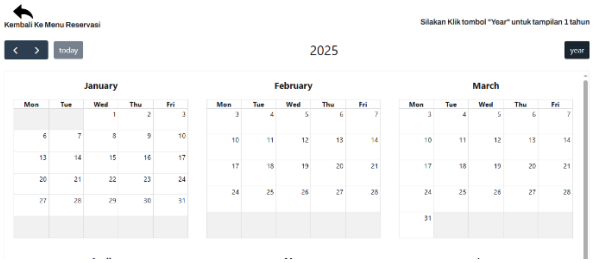


Options Page Interface

On this options interface, two selectable options are provided to enable users to proceed to the subsequent page. The first option is “Reserve Now”, which allows users to continue the process of making a group visit reservation. If users intend to submit a group visit reservation request, they may select this option to proceed to the next stage. Alternatively, if users wish to cancel an existing reservation, they may select the “Reservation Cancellation” option, through which the system will redirect them to the reservation cancellation process.

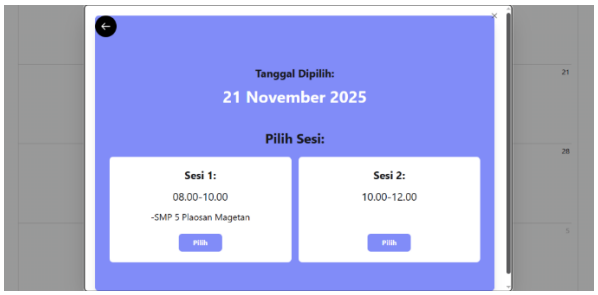
Date Selection Interface

After selecting an option, users are directed to the date selection interface, where they are required to choose the desired visit date and month. At this stage, users are also able to view the available quota for the selected date. The calendar displayed on this interface includes visual indicators, such as a light yellow highlight on specific dates; for example, May 23 is highlighted in yellow to indicate the current date. In addition, public holidays are automatically disabled and cannot be selected. In the upper right section of the calendar, navigation buttons are provided to display the calendar in a full one-year view. Users may also navigate to the following year by clicking the right arrow or return to the previous year by clicking the left arrow.



Session Selection Interface

After selecting the month and date, users are subsequently directed to the session selection interface to choose a visit session. Two visit sessions are available, each equipped with a "Select" button that allows users to make a reservation according to the preferred time slot. If a particular session has already been reserved, the name of the institution that made the reservation will be displayed beneath the corresponding session time information. For example, if the first session from 08:00 to 10:00 has been reserved by SMPN 5 Plaosan, the institution's name will appear below the selected session time schedule.



Visit Data Entry Interface

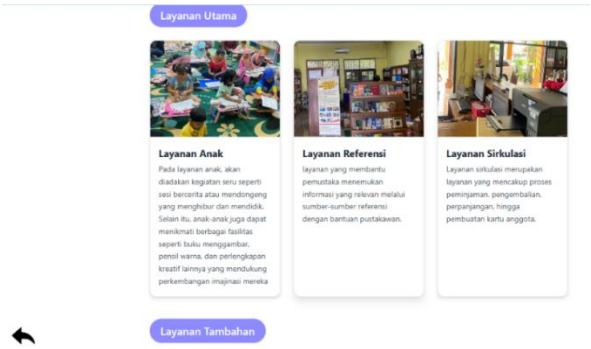
At this stage, users are required to complete several essential pieces of information necessary for the visit validation process. The required data include the name of the group leader, the originating institution, the number of participants, and an active email address to be used as the confirmation medium. In addition, a notes field is provided to allow users to communicate special requirements, specific requests, or any additional information deemed necessary. At the end of the form, users are also required to upload an official visit request letter in PDF format as a supporting document. This document upload feature ensures that each reservation is verified with complete administrative documentation.

Service Selection Page

On this interface, all available services are grouped into two categories, namely primary services and additional services, allowing users to select services according to their needs. Within the primary services category, three services are provided: circulation services, reference services, and children's services. These services represent the core facilities offered

by the library to support borrowing activities, reference searching, and specialized services for children.

Meanwhile, the additional services category includes magazine services, information retrieval services, digital collection services, and learning commons services. These additional services are intended to provide a more comprehensive visit experience. Furthermore, each displayed service is accompanied by a brief description to assist users in understanding the distinctions among the available services.



Booking Details Interface

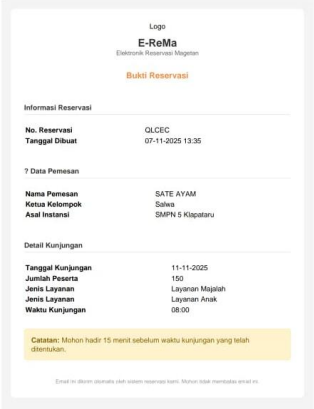
After users complete the booking form, the system displays a booking details page intended to ensure that the submitted data are accurate and comply with the specified requirements. If the entered information is correct, users may click the Next button to proceed with the process and receive confirmation that the reservation has been successfully submitted. This page provides an Edit button that allows users to revise the information as needed. In addition, the upper right corner of this page displays a booking code or reservation number, which serves as the reservation identifier and can be used by users if they wish to cancel the booking.

Reservation Proof Interface

The displayed interface represents the reservation proof in PDF format generated by the ER-Pusma system (Electronic Reservation of the Magetan Library). At the top of the document, users can see the official logo accompanied by the system name and the title “Reservation Proof”, indicating that the document serves as an official confirmation of the booking process. The initial section of the document contains basic reservation information, such as the reservation number and the date the document was generated.

Subsequently, the booking details are presented, including the identity of the applicant. The following section displays detailed visit schedule information. The services selected by the applicant are also listed to facilitate the library staff in preparing the visit requirements. Directly below this information, a highlighted note in yellow is provided as a reminder for the visiting group to arrive 15 minutes prior to the scheduled visit time. At the end of the document,

additional information is included, stating that the email containing this reservation proof is automatically generated by the system and therefore does not require a reply from the recipient.



Admin Interface

After a successful login process, the administrator is directed to the dashboard to monitor visit data, including visits that have been completed, upcoming visits, as well as visits that have been canceled. The admin page provides features that allow the administrator to display visit data on a monthly or yearly basis. In addition, the administrator is able to add or modify information related to annual library activities and update detailed information regarding group visits within the visit gallery section.

Product Development Stages

Requirements Analysis

This research and development study was conducted using the Waterfall development model. The stages applied in the development process are described in detail as follows:

a. Interview.

Through interviews, the researcher was able to obtain a deeper understanding of how informants perceive and interpret the phenomena occurring within the institution. In this data collection process, the researcher conducted an interview with one informant who serves as a librarian at the Department of Archives and Library of Magetan Regency. Based on the interview results, it was found that the group visit reservation service at the Department of Archives and Library of Magetan Regency does not yet have a

standardized system, which frequently results in difficulties related to scheduling and visit data recording.

b. Observation

Observations were conducted at the Department of Archives and Library of Magetan Regency. The observation results revealed issues related to frequent schedule conflicts, which negatively affected the conduciveness of service delivery at the institution. These conditions required circulation service staff to assist in managing and serving group visits simultaneously, thereby disrupting the existing service workflow. The findings from both interviews and observations served as a fundamental basis for designing a more effective and efficient website-based group visit reservation system.

Design

During the interface design stage, the researcher developed a system design that actively involved users. This process included the preparation of initial interface designs and website structures in the form of prototypes using Figma, allowing each element to be easily adjusted, including features, color schemes, text, and images. Interface design was carried out for each website page by considering the selection and placement of features based on functional requirements.

The selection of blue, white, and gray color schemes was the result of joint discussions with the Department of Archives and Library of Magetan Regency. Blue was chosen to represent trust and openness of information, white symbolized transparency in public services, and gray was intended to convey a neutral and modern impression. In addition, the icons used were also determined through discussion, as the library required icons that are clear and easily understood by users. With this interface design, it is expected that users will experience a comfortable, easy-to-navigate, and informative interaction when accessing the ER-Pusma website.

Program Coding

At this stage, the development of the media was carried out to integrate content into information that can be utilized by users. The designs previously created in Figma were then implemented into the system. This phase involved the application of appropriate programming languages in accordance with the predefined design Supriyanti (2005). The product developed in this study is a website-based group visit reservation service for the Department of Archives and Library of Magetan Regency, implemented using various technological tools.

The initial implementation involved website programming as a medium for delivering information related to group visit reservation services, using Visual Studio Code as the code editor to facilitate the website development process. Subsequently, content carried out through the website's admin page, which provides several menus designed to input all information required by the system Agustini (2017). All uploaded content is displayed on the user interface to assist prospective visitors in understanding procedures and requirements before selecting services and submitting reservation requests Agustini (2017). This content management process ensures that the information presented on the website remains up to date, accurate, and aligned with the needs of the Department of Archives and Library of Magetan Regency.

The next stage involved unit testing, which was conducted to determine whether the functionality of each feature operates as intended. Validation testing was carried out using questionnaire instruments developed by the researcher. The validity assessment involved the

media experts instrument consisted of several assessment aspects based on the WebQual framework, including website appearance, ease of use, navigation, website representation, information accuracy, interaction quality, format, and personalization and the subject matter experts included aspects related to service characteristics and reservation elements, with indicators such as information quality, service completeness, service speed and efficiency, availability and accessibility, and service suitability to user needs.

Program Testing

At this stage, the researcher conducted field testing involving groups of visitors who had made group visit reservations in 2024 at the Department of Archives and Library of Magetan Regency. These groups were asked to use the developed product to complete the group visit reservation process. After the system had been fully utilized, users were asked to complete a field trial questionnaire as a form of feedback regarding their user experience with the system.

Maintenance

At this stage, the completed group visit reservation website was officially implemented at the Department of Archives and Library of Magetan Regency and made available for use by visitors. System maintenance activities were subsequently conducted to ensure that all system functions continued to operate properly, through regular inspections and corrective actions when issues or errors were identified before they affected user convenience. In addition, adaptive maintenance was carried out to adjust the system in response to changes in user requirements and future technological developments. Various inputs and recommendations obtained during this phase may serve as a foundation for further system development in subsequent studies.

Data Analysis

Based on the validation tests conducted by subject matter experts and media experts on the developed product, the researcher performed data presentation and analysis. This process aimed to determine the extent to which the product met the indicators established in the assessment rubric. The evaluation was conducted using the following formula:

Average Score:

$$\bar{x} = \frac{\sum skor\ diperoleh}{\sum pertanyaan}$$

Validation Percentage:

$$P = \frac{\sum x}{\sum x_1} \times 100\%$$

Information

P = Percentage
∑_x = Total Respondents' Answer Values
∑_(x_1) = Ideal Value Amount

The criteria applied in the validity testing to decide whether revisions are necessary are presented in the following table (Arikunto 2002).

Percentage	Qualification	Information
85% - 100%	Sangat Valid	No Revision
75% - 84%	Valid	No Revision
55% - 74%	Kurang Valid	Revision
<55%	Tidak Valid	Revision

Media Expert Validation Data

The validation data were obtained by distributing evaluation sheets to a media expert validator with expertise in information technology. The assessment covered several indicators, namely: (1) usability; (2) information accuracy; (3) information quality; and (4) user satisfaction. Based on the validation results, the overall indicator score reached 95%, indicating that the product is highly valid and suitable for use. Although the feasibility of the indicators is considered very high, improvements to other aspects are still required to further enhance the quality of the group visit reservation website.

Subject Matter Expert Validation Data

The validation data were obtained by distributing evaluation sheets to a subject matter expert with expertise in library science. The results of the subject matter expert validation showed that: (1) the service characteristics indicator achieved a score of 87.5%; and (2) the reservation elements indicator achieved a score of 88.3%. The average score of all indicators was 88%, indicating that the product is highly valid and suitable for proceeding to the next development stage. Nevertheless, although the product meets the feasibility requirements, improvements are still necessary to enhance the overall quality of the developed system.

Field Testing Data

The validation data were obtained by distributing evaluation sheets to a subject matter expert with expertise in library science. The results of the subject matter expert validation showed that: (1) the service characteristics indicator achieved a score of 87.5%; and (2) the reservation elements indicator achieved a score of 88.3%. The average score of all indicators was 88%, indicating that the product is highly valid and suitable for proceeding to the next development stage. Nevertheless, although the product meets the feasibility requirements, improvements are still necessary to enhance the overall quality of the developed system.

Percentage	Criteria
80% - 100%	Very Eligible
66% - 79%	Eligible
56% - 65%	Quite Eligible
<55%	Less Eligible

The target respondents for the questionnaire distribution in this development study were group visitors who had completed group visit reservations at the Department of Archives and Library of Magetan Regency in 2024. A total of 15 respondents participated in the field testing. The results of the field trial based on the evaluation indicators were as follows: (1) library service characteristics, consisting of six indicators, achieved a percentage score of 95%; (2) reservation elements, consisting of seven indicators, achieved a percentage score of 94.5%; (3) usability, consisting of eight indicators, achieved a percentage score of 96%; (4) information quality, consisting of two indicators, achieved a percentage score of 100%; and (5) interaction

quality, consisting of four indicators, achieved a percentage score of 97.5%. Based on the overall percentage score of 96%, it can be concluded that the developed product is highly feasible for use.

Public libraries are institutions established to serve the entire community as centers for lifelong learning, regardless of age, gender, ethnicity, race, religion, or socio-economic background (Iztihana and Arfa 2020). As stated in Chapter I Article 3 of the same law, the functions of libraries include education, research, information preservation, and recreation. To support these functions, public libraries are required to have effective service systems, one of which is a visit reservation service (Allard & Voutama, 2024). The success of a library can be measured by the extent to which its services operate effectively and can be utilized optimally by users. The more effectively services are implemented and aligned with users' needs, the higher the level of success achieved by the library in fulfilling its functions.

Based on the results of the development and testing processes, it can be concluded that the group visit reservation website provides a tangible contribution to improving the quality of library services (Ni Gusti Nyoman Suci Murni Made Ruki 2017). The online-based reservation system, which can be accessed without the need to physically visit the library, has proven effective in addressing the primary issue of frequent schedule conflicts. Through this website, the group visit reservation process becomes more efficient, as users can easily access information regarding reservation procedures without having to visit the library in person. In addition, users are given the flexibility to select services according to their needs and to view annual activities conducted by the Department of Archives and Library of Magetan Regency.

Validation conducted by media experts indicated that the product falls into the "Highly Valid" category, with an average score of 91%. This score demonstrates that the appearance, structure, and functionality of the system interface meet feasibility criteria as proposed by Barnes and Vidgen (2003). The user interface was designed with consistent layout and navigation across all pages, supported by icons that assist users in understanding system functions, and a well-organized layout for presenting relevant information for users to quickly and easily understand core features. Furthermore, the inclusion of a reminder notification feature sent one day prior to the visit contributes to increased efficiency and ensures timely information delivery to users.

The evaluation results indicate high feasibility, with scores of 95% from media experts, 88% from subject matter experts, and 96% from field testing. These findings suggest that the system meets key quality dimensions, including usability, information quality, and interaction quality, as reflected in the WebQual framework. System development was guided by library service criteria proposed by Supriyanto (2007). These findings suggest that the system meets key quality dimensions, including usability, information quality, and interaction quality, as reflected in the WebQual framework Kesuma Astuti & Sri Agustina (2022). From a practical perspective, the high usability score demonstrates that users are able to navigate the system easily, while the high information quality score indicates that the system provides clear and relevant information to support decision-making during the reservation process.

The developed website provides a responsive user experience in accessing digital group visit reservation services (Sari 2020). In the context of information management and user discipline, a system capable of delivering real-time information contributes to increased user engagement and responsibility Barnes, S., & Vidgen (2003). The online reservation system is equipped with features such as reminder notifications sent one day prior to the visit and an automatically generated invoice or reservation confirmation sent via email as proof of successful

booking. These findings are supported by field trial results involving 15 respondents, which yielded a score of 96% categorized as "Highly Feasible." Therefore, it can be concluded that the developed product is both highly valid and feasible for use in supporting digital group visit reservation services.

However, these results should be interpreted with caution. The relatively small number of respondents 15 in the field testing phase may limit the generalizability of the findings. In addition, the use of self-reported questionnaire data introduces the possibility of response bias, where users may provide favorable evaluations due to novelty effects or limited prior comparison with similar systems (Suli and Nirsal 2023). Furthermore, the absence of inferential statistical analysis restricts the ability to draw broader conclusions regarding the effectiveness of the system beyond the specific institutional context.

When compared with previous studies on web-based information systems in library services, the findings of this study are consistent with research that highlights the positive impact of digital systems on service efficiency and user satisfaction. However, unlike prior studies that often focus on general library information systems, this research specifically emphasizes group visit reservation management, thereby offering a more targeted contribution to operational service improvement in public libraries. The integration of features such as automated reminders and structured booking workflows represents a practical innovation that aligns with current trends in digital service transformation. The alignment between high validation scores and positive user responses indicates that the system design successfully translates these theoretical principles into practical application. At the same time, the identified limitations highlight the need for further research involving larger samples, more rigorous validation techniques, and comparative analysis across different institutions.

Overall, the results demonstrate that the developed system not only addresses practical challenges related to scheduling and service management but also contributes to the ongoing digital transformation of public library services. The study provides evidence that technology-based solutions can enhance both operational efficiency and user experience when designed in accordance with user needs and service quality principles. In addition to these findings, the group visit reservation website offers several advantages such as reduces schedule conflicts, provides real-time access to information, and allows users to submit reservations without having to visit the library directly. A simple and intuitive interface, combined with automatic notification and email invoice features, enhances user discipline and service efficiency. Moreover, the system assists librarians in managing reservation data in a more structured manner, thereby reducing administrative workload.

The use of the Waterfall development model in this study enabled a systematic and structured product development process, beginning with requirements analysis and continuing through refinement and improvement stages. Each phase is interconnected and provides feedback for enhancement, ensuring that the resulting product is relevant and aligned with user needs. The analysis stage involved librarians from the Department of Archives and Library of Magetan Regency to identify problems and formulate appropriate system requirements. The outcomes of this stage served as the foundation for the design phase, during which the system architecture was developed based on identified needs. Subsequently, the implementation and unit testing stages incorporated expert feedback to ensure content and interface suitability. The system testing and maintenance stages involved direct user participation through field trials, aimed at assessing product effectiveness and feasibility in real-world usage contexts.

With development outcomes and testing data indicating a very high level of validity, the group visit reservation website developed in this study demonstrates strong potential in enhancing user responsibility toward scheduled visits. Features such as visit reminders and automatically generated invoices or reservation confirmations sent via email serve as effective reminders to ensure punctual attendance at the Department of Archives and Library of Magetan Regency. These features facilitate access to information and foster user awareness regarding the obligation to arrive on time. Through a practical digital approach, the system contributes significantly to strengthening group visit reservation services.

CONCLUSION

Based on the findings of the study entitled "Development of a Website-Based Group Visit Reservation Service at the Department of Archives and Library of Magetan Regency" and the discussion presented above, it can be concluded that the developed website successfully provides an online group visit reservation system equipped with digital reservation proof and automatic reminder notification features. Through this system, users are able to independently complete the reservation process, starting from entering group data and selecting service units to be visited, to receiving reservation confirmation via email.

The digital reservation proof feature enables users to store and present visit confirmations without the need for physical documents, while the automatic reminder notifications sent one day prior to the scheduled visit help ensure timely attendance. These features play a crucial role in supporting an efficient and well-organized reservation service and facilitate more effective visit schedule management at the Department of Archives and Library of Magetan Regency. Overall, the evaluation results from subject matter experts, media experts, and field trials indicate that the developed website meets feasibility criteria and is appropriate for implementation within the context of public library services. The system is considered capable of supporting more efficient, practical, and user-oriented library service delivery

SUGGESTION

Based on the conclusions of this study, it is recommended that the Department of Archives and Library of Magetan Regency formally implement and optimize the utilization of the developed system to enhance the efficiency and effectiveness of group visit reservation services. In addition, future research is encouraged to further develop the system by incorporating interactive features, such as user ratings, reviews, and feedback mechanisms. The integration of these features is expected to support continuous evaluation and improvement of service quality, thereby contributing to the advancement of more adaptive, user-centered, and sustainable library service systems

THANK YOU-NOTE

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