DESIGN OF A SOCIAL MEDIA AGENCY SERVICE ORDERING INFORMATION SYSTEM USING RAPID APPLICATION DEVELOPMENT

Tyara Raudhotul Jannah[1]; Siti Nurlela[2*]
Information Systems Study Program
Nusa Mandiri University, Jakarta, Indonesia
https://www.nusamandiri.ac.id
11220658@nusamandiri.ac.id[1]; siti.sie@nusamandiri.ac.id[2]
(*) Corresponding Author

The creation is distributed under the Creative Commons Attribution-NonCommercial 4.0 International License.

Abstract—*Larka House Jakarta is a social media agency that still relies on manual processes through WhatsApp and Instagram Direct Message to receive orders and creates invoices manually using Canva without an automatic transaction history, which increases the risk of data loss and miscommunication with clients. This research aims to design a website-based service ordering information system that enables clients to place orders online, monitor order progress, and automatically generate invoices. The system was developed using the Rapid Application Development (RAD) method, covering the stages of Requirements Planning, User Design, Construction, and Cutover, and was built with the CodeIgniter 4 framework and a MySQL database. System testing was conducted using Black Box Testing on 15 test scenarios and User Acceptance Testing (UAT) on 10 usage scenarios with seven participants (Admin and Client users). The results show that the system was successfully designed with features including online ordering, content draft management with a revision mechanism, payment confirmation, structured consultation, and automatic invoice generation. All Black Box Testing scenarios resulted in a Valid status, and all UAT scenarios were rated Successful with a 100% success rate, indicating that the system met the defined functional requirements and that the tested scenarios could be completed by both Admin and Client participants without failure. In the system, invoice generation takes less than 10 seconds, compared with approximately 4 to 10 minutes manually in Canva (an approximate estimate by agency staff).*

Keywords: *codeigniter, information system, invoice, rapid application development, service ordering.*

Intisari—*Larka House Jakarta merupakan agensi media sosial yang masih mengandalkan proses manual melalui WhatsApp dan Instagram Direct Message untuk menerima pesanan, serta membuat invoice secara manual menggunakan Canva tanpa riwayat transaksi otomatis, sehingga meningkatkan risiko kehilangan data dan kesalahan komunikasi dengan klien. Penelitian ini bertujuan merancang sistem informasi pemesanan layanan berbasis website yang memungkinkan klien memesan secara daring, memantau progres pesanan, dan menghasilkan invoice secara otomatis. Sistem dikembangkan dengan metode Rapid Application Development (RAD) yang mencakup tahap Requirements Planning, User Design, Construction, dan Cutover, serta dibangun menggunakan framework CodeIgniter 4 dan basis data MySQL. Pengujian sistem dilakukan dengan Black Box Testing pada 15 skenario uji dan User Acceptance Testing (UAT) pada 10 skenario penggunaan dengan tujuh partisipan (pengguna Admin dan Klien). Hasil penelitian menunjukkan bahwa sistem berhasil dirancang dengan fitur pemesanan daring, pengelolaan draf konten dengan mekanisme revisi, konfirmasi pembayaran, konsultasi terstruktur, dan pembuatan invoice otomatis. Seluruh skenario Black Box Testing berstatus Valid dan seluruh skenario UAT dinyatakan Berhasil dengan tingkat keberhasilan 100%, yang menunjukkan bahwa sistem memenuhi kebutuhan fungsional yang ditetapkan dan skenario yang diuji dapat diselesaikan oleh partisipan Admin maupun Klien tanpa kegagalan. Pembuatan invoice di dalam sistem memerlukan waktu kurang dari 10 detik, dibandingkan sekitar 4 sampai 10 menit secara manual di Canva (perkiraan kasar dari staf agensi).*

Kata Kunci: *codeigniter, invoice, pemesanan layanan, rapid application development, sistem informasi.*

INTRODUCTION

Social media has become an inseparable part of Indonesian society. According to the Digital 2026: Indonesia report, the number of social media users in Indonesia reached 180 million, equivalent to 62.9% of the total population, an increase of 26% compared to the previous year (We Are Social & Meltwater, 2026). This rapid growth has changed

Vol. 22, No. 1 March 2025 | DOI https://doi.org/10.33480/techno.v21i1.XXXX

consumer behavior and the marketing strategies of business owners, creating opportunities as well as a need for more professional social media management services, particularly for micro, small, and medium enterprises (MSMEs), culinary and fashion businesses, and content creators.

This condition opens great opportunities for social media agencies to grow, but at the same time requires agencies to have more structured management systems as their number of clients increases. The use of social media has been shown to have a positive and significant effect on the sales of MSMEs (Poetra et al., 2025). This situation increases the demand for social media agency services that can manage content and marketing strategies professionally, including agencies such as Larka House Jakarta, the object of this research.

Larka House Jakarta is a social media agency that serves the social media account management needs of various clients in the culinary, fashion, and beauty sectors. In practice, clients who want to use Larka House services must first contact the agency via WhatsApp or Instagram Direct Message to ask about service packages, convey their needs, and confirm their orders, because no other official ordering channel is available. In addition to ordering, billing is also done manually using the graphic design application Canva for each client, without a system that stores invoice history automatically, so that data tracing must be done through long chat histories whenever discrepancies in billing data occur.

The implementation of web-based ordering information systems in service businesses has been shown to improve data management efficiency and minimize manual recording errors (Primanda & Fajri, 2024). Manual service order management has also been shown to cause inefficient data recording and increase the potential for errors in customer service (Setiawan et al., 2023), so a website-based information system that integrates ordering, data management, and reporting in a single platform is needed, as is the case at Larka House Jakarta. The CodeIgniter 4 framework was used in system development because it has been used to build web-based information systems with MySQL databases (Nasril & Adhitya, 2025), making it a suitable choice for the Larka House Jakarta service ordering information system. A study on a social media content information system at another digital agency also shows that a web-based system can make the content-creation work of agency staff more organized and easier to coordinate (Supriatiningsih et al., 2023).

Table 1. Comparison of This Study with Related Ordering Systems

Study	Order	Pay	Status	Invoice	Rev.
Primanda & Fajri (2024), restaurant	✓	✓	✓	–	–
Sondang (2024), printing	✓	✓	–	✓	–
Rizal et al. (2022), event organizer	✓	✓	–	–	–
Fadhliansyah et al. (2025), food MSME	✓	✓	✓	–	–
This study (social media agency)	✓	✓	✓	✓	✓

Source: (Research Results, 2026)
Note: ✓ = reported in the article; – = not reported. Order = online ordering; Pay = payment confirmation or proof; Status = order status tracking; Invoice = invoice generated or printed; Rev. = client revision and approval of content drafts.

Table 1 shows that the ordering systems reviewed above handle orders for food, printed goods, and events, and some also handle payment confirmation, order status tracking, or invoice printing (Setiawan et al., 2023). A digital service ordering system centers on service selection and automatic price calculation (Padeli & Kholid, 2026), and the one study on a digital agency covers the internal content-production workflow without ordering and billing (Supriatiningsih et al., 2023). To the authors' knowledge, none of them lets the client review, comment on, and approve content drafts inside the ordering system, or issues the invoice automatically once the final content is approved.

Based on these problems, this research proposes the design and implementation of a website-based social media agency service ordering information system at Larka House Jakarta. Through this system, clients can place orders directly without depending on WhatsApp or Instagram Direct Message, invoices can be created automatically, and the risk of errors caused by manual communication can be minimized. The development method used is Rapid Application Development (RAD), chosen because of its iterative approach that involves users directly at every stage, making it suitable for developing medium-scale systems with limited development time (Sondang, 2024). The contribution of this research is an integrated, web-based platform tailored to the

operational cycle of a social media agency (order, content revision, payment confirmation, progress monitoring, and automatic invoicing), together with an evaluation of its functionality, performance, security, and user acceptance in a real agency setting. The specific objectives are to reduce the risk of losing order information, to make transaction history traceable, and to remove manual invoice creation at Larka House Jakarta.

MATERIALS AND METHODS

This research used three data collection techniques: observation, interviews, and literature study. Observation was carried out directly on the content service ordering flow at Larka House Jakarta, covering the process of receiving orders via WhatsApp and Instagram Direct Message and creating invoices using Canva, in order to obtain a real picture of the existing system. Interviews were conducted in a structured manner with the owner of Larka House Jakarta using a prepared list of questions, with the aim of exploring system requirements, perceived problems, and expectations for the system to be built. The literature study was carried out by collecting references from journals, books, and research articles related to information systems, the Rapid Application Development (RAD) method, CodeIgniter-based programming, and social media management as the theoretical basis for system design.

The system was developed with Rapid Application Development (RAD), chosen because its iterative approach involves users at every stage and allows the system to be adjusted quickly when requirements change (Ali et al., 2022; Anshori et al., 2025). Four phases were applied. In Requirements Planning, the observation of the WhatsApp and Instagram Direct Message ordering flow and the Canva invoicing, together with the structured interview with the owner, produced the functional and non-functional requirements; each requirement was traced to an observed problem (Table 2). In User Design, the requirements were translated into UML models, the Entity Relationship Diagram (ERD) and Logical Record Structure (LRS), and interface designs. In Construction, the designs were implemented with the CodeIgniter 4 framework, PHP, and MySQL following the Model-View-Controller (MVC) pattern. In Cutover, the system was tested with Black Box Testing and User Acceptance Testing (UAT) (Zulkarnaini et al., 2023) and published online through a web hosting service. User involvement consisted of the owner of Larka House Jakarta as the interviewee and source of requirements, and seven participants (three agency staff as Admin users and four Client users) who executed the UAT scenarios on the deployed system.

Table 2. From Observed Problems to Implemented Features

Problem identified at Larka House	Feature implemented
Orders only via WhatsApp/DM; risk of losing order information	Online ordering with brief, target audience, and content style; orders stored in one database
Transaction history difficult to trace	Central database of orders, payments, drafts, and invoices; client transaction history page
Revisions and approvals buried in chat	Content draft upload with revision comments and approval per draft
Payment confirmed informally	Payment proof upload and admin verification
Client cannot see progress	Real-time order status monitoring
Manual invoice creation in Canva	Automatic PDF invoice issued when all drafts are approved

Source: (Research Results, 2026)

The designed system has two categories of users with different access rights, namely the Admin as the manager from Larka House and the Client as the external user. The functional requirements of the system include login authentication, service package data management, online service ordering, content draft management with a revision mechanism, payment confirmation, automatic invoice generation, real-time order progress monitoring, structured consultation between client and admin, and order report recapitulation. The non-functional requirements were defined in four aspects: operational (browser-based access from computers and mobile devices), security (mandatory login with encrypted passwords and role-based access), information (accurate and centrally stored order, invoice, and status data), and performance (reasonable response time without duplicate recording). Usability, reliability, and maintainability were not defined as separate requirements, which is acknowledged as a limitation.

Evaluation design

Evaluation was designed in two parts. Black Box Testing covered 15 functional scenarios, and a scenario is Valid if the actual output matches the expected result. UAT involved seven participants: three agency staff as Admin users (the content creator, the HRD, and the social media specialist,

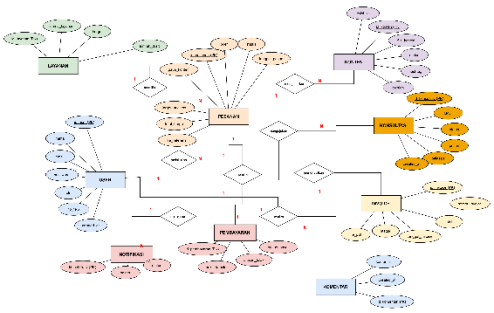
Techno Nusa Mandiri: Journal of Computing and Information Technology
Vol. 22, No. 1 March 2025 | DOI https://doi.org/10.33480/techno.v21i1.XXXX

who is also the researcher) and four Client users (the agency owner and three acquaintances of the researcher). Each of the 10 use cases was executed by one to four participants (23 executions in total) on 31 July 2026 using a UAT form that lists the use case, its description, the test cases (valid and invalid inputs), the result (Successful/Failed), and the name of the tester. An execution is Successful if the participant completes all test cases and the output matches the expectation, and the success rate is the number of Successful executions divided by the total number of executions.

The website was evaluated with GTmetrix (page performance and structure), Google PageSpeed Insights (Lighthouse performance, accessibility, best practices, and SEO), and Mozilla HTTP Observatory (HTTP security configuration). GTmetrix and the first Observatory scan were run on 31 July 2026 (Seattle test server, Chrome 142, Lighthouse 12.6.1); PageSpeed Insights and a repeated Observatory scan were run in October 2026. The time needed to create an invoice manually was estimated from the experience of the agency staff, without formal timing.

RESULTS AND DISCUSSION

The database design of the system is illustrated by an Entity Relationship Diagram (ERD) involving seven main entities, namely User, Service, Order, Payment, Content, Comment, and Invoice, as shown in Figure 1. The ERD was then transformed into a Logical Record Structure (LRS) to clarify the primary and foreign keys of each table as a guide for implementing the database in MySQL.



Source: (Research Results, 2026)
Figure 1. Entity Relationship Diagram (ERD) of the Proposed System

In addition to the database design, the User Design stage also produced a Use Case Diagram that describes the interaction between actors and the proposed system. The Larka House Jakarta service ordering information system involves two main actors, namely the Admin and the Client, as shown in Figure 2.



Source: (Research Results, 2026)
Figure 2. Use Case Diagram of the Proposed System

A description of each use case in the proposed system is given in Table 3.

Table 3. Use Case Description of the Proposed System

Actor	Use Case	Description
Admin	Login, manage services, confirm payment, upload content draft, view revision comments, update status, generate invoice, fill in content caption & hashtags, fill in payment rejection reason, view reports	The Admin manages all master data of orders and transactions in the system, including reviewing orders, uploading content drafts, following up on revision comments from the Client, and issuing invoices automatically.
Client	Register, login, view services, create order, upload payment proof, view content draft, give revision comment, approve content, view status, download invoice, view history	The Client places orders independently, monitors order progress, gives revision comments on content drafts uploaded by the Admin, and downloads invoices issued automatically by the system.

Source: (Research Results, 2026)

Based on the implementation results, the Larka House Jakarta service ordering information system was successfully built with features for both user categories. On the Client side, the system provides registration and login, a catalog of service packages with prices, online service ordering by filling in the brief, target audience, and content style, real-time order progress monitoring, payment proof upload, revision comments or approval on content drafts uploaded by the Admin, structured

consultation, and access to invoices and transaction history. On the Admin side, the system provides login authentication, service package data management, order review and status updates, payment proof verification, content draft upload, automatic invoice generation when all content drafts have been approved by the client and the order is declared complete, and order report recapitulation that can be printed for a specific period. The presence of the online ordering and automatic invoice features replaces the ordering process that previously could only be done via WhatsApp and Instagram Direct Message, and eliminates the dependence on manual invoice creation using Canva that Larka House Jakarta had previously used.

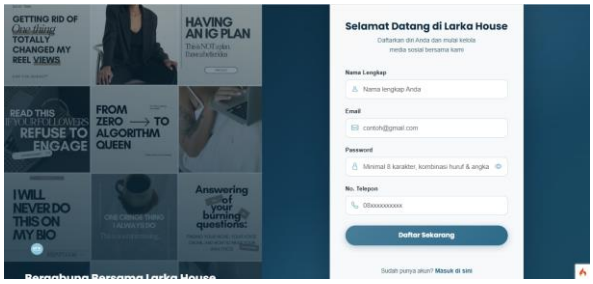
The following are the implementation results of the main interfaces of the Larka House Jakarta service ordering information system, covering both the Client side and the Admin side.

The landing page is the initial view of the website, which displays a brief profile of Larka House Jakarta and access to the Login and Register menus.



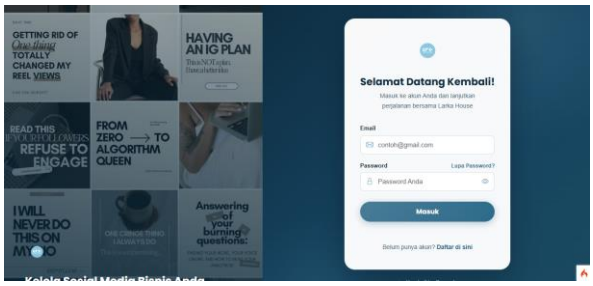
Source: (Research Results, 2026)
Figure 3. Landing Page of the Larka House Website

The registration page is used by prospective clients to create a new account by entering a name, email, password, and phone number before they can access the services.



Source: (Research Results, 2026)
Figure 4. Account Registration Page of the Larka House Website

The login page serves as the user authentication medium. After the email and password are validated, the user is directed to the dashboard according to their role (Admin or Client).



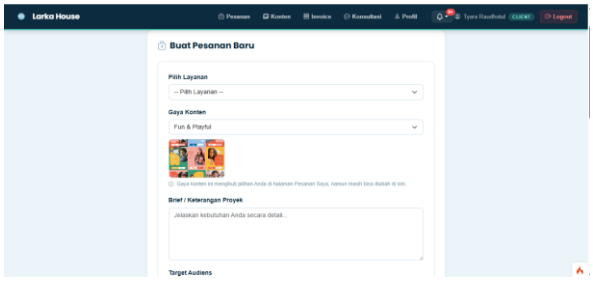
Source: (Research Results, 2026)
Figure 5. Login Page of the Larka House Website

The client dashboard displays a summary of order status and quick access to the ordering, content, invoice, and consultation menus.



Source: (Research Results, 2026)
Figure 6. Client Dashboard of the Larka House Website

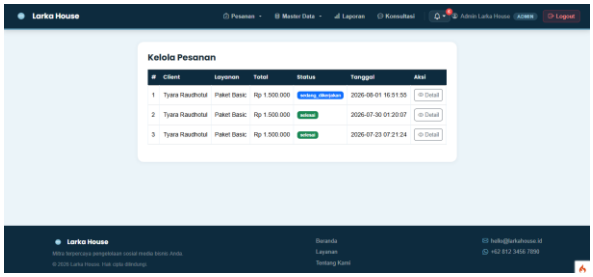
The ordering page is used by the client to select a service and content style and to fill in the brief of their needs as the basis for order processing by the Larka House team.



Source: (Research Results, 2026)
Figure 7. Content Ordering Page of the Larka House Website

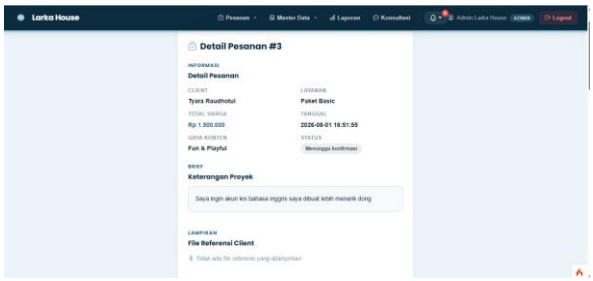
The admin dashboard displays the list of orders with their status, total bill, and order date, and provides menus to manage the entire service ordering process.

Techno Nusa Mandiri: Journal of Computing and Information Technology
Vol. 22, No. 1 March 2025 | DOI https://doi.org/10.33480/techno.v21i1.XXXX



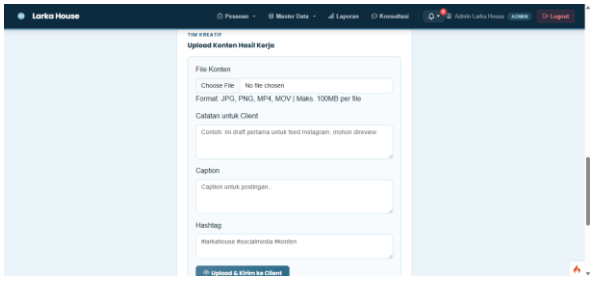
Source: (Research Results, 2026)
Figure 8. Admin Dashboard of the Larka House Website

The order management page is used by the admin to monitor order details, verify payments, and update the service progress status.



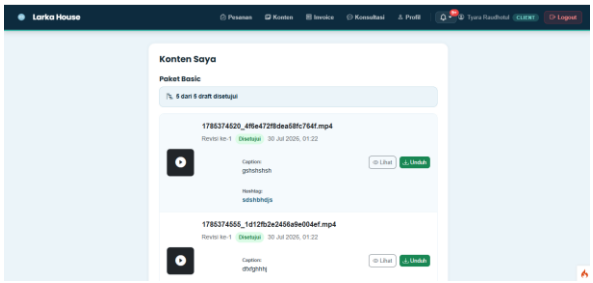
Source: (Research Results, 2026)
Figure 9. Admin Order Management Page of the Larka House Website

This page is used by the admin to upload the content drafts produced along with captions and hashtags, and then send them to the client for review.



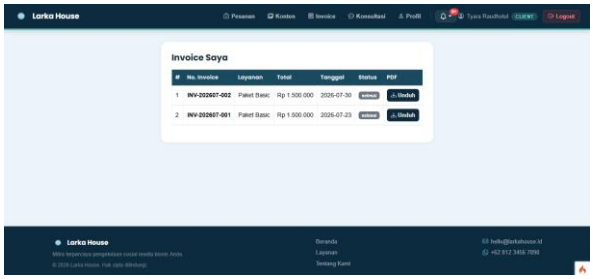
Source: (Research Results, 2026)
Figure 10. Admin Content Draft Input Page of the Larka House Website

The client can view the content drafts uploaded by the admin and give approval or revision comments directly on this page.



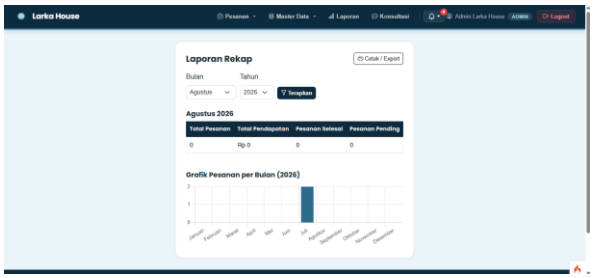
Source: (Research Results, 2026)
Figure 11. Client Content Draft Page of the Larka House Website

The invoice page displays the list of bills issued automatically by the system after all content drafts are approved, complete with an option to download them in PDF format.



Source: (Research Results, 2026)
Figure 12. Client Invoice Page of the Larka House Website

The report page is used by the admin to view a recapitulation of the number of orders and total revenue for a specific month and year.



Source: (Research Results, 2026)
Figure 13. Admin Recap Report Page of the Larka House Website

System testing was carried out using Black Box Testing on 15 test scenarios covering the login, registration, ordering, payment confirmation, content draft, invoice, forgot password, consultation, and recap report modules. The test results are shown in Table 4.

Table 4. Black Box Testing Results

No	Form/Page	Test Scenario	Expected Result	Status
1	Login Form	Entering a correct email and password, then clicking Login	The system redirects to the dashboard according to the role	Valid
2	Login Form	Entering an incorrect email or password, then clicking Login	The system displays an error message and denies access	Valid
3	Registration Form	Filling in all registration data correctly and clicking Register	The Client account is created and can be used to log in	Valid
4	Order Form	Client fills in all required fields and clicks Order	The order is saved and appears in the Admin order list	Valid
5	Order Form	Client clicks Order without filling in the required fields	The system displays a validation message and does not process the order	Valid
6	Payment Confirmation	Client uploads a transfer receipt and clicks Confirm	The payment proof is uploaded and a notification is sent to the Admin	Valid
7	Content Draft Page	Client writes a revision comment on the Admin's content draft	The revision comment is saved and a notification is sent to the Admin	Valid
8	Content Draft Page	Client clicks the Approve button on a content draft	The content status changes to Approved and the Admin receives a notification	Valid
9	Order Management (Admin)	Admin confirms the Client's payment	The order status is updated and the Client receives a notification	Valid
10	Invoice Page	All drafts are approved and the system generates the invoice automatically	The PDF invoice is created and can be downloaded by the Client	Valid
11	Forgot Password	Entering the registered email and phone number, then clicking Verify	The system verifies the data and redirects to the password reset page	Valid
12	Order Form	Client tries to create an order without selecting a content style first	The system rejects the order and displays the message "Pilih gaya konten terlebih dahulu" ("Select a content style first")	Valid
13	Upload Content Draft (Admin)	Admin uploads a content draft file for an order in progress	The content file is uploaded and appears on the Client's content page	Valid
14	Consultation Page	Client sends a consultation question and the Admin replies	The question is saved and the Admin's reply is displayed on the Client's consultation page	Valid
15	Recap Report (Admin)	Admin filters the report by a specific month and year	The order recap data and total revenue for the period are displayed correctly	Valid

Vol. 22, No. 1 March 2025 | DOI https://doi.org/10.33480/techno.v21i1.XXXX

Source: (Research Results, 2026)

All Black Box Testing scenarios resulted in a Valid status, which shows that all main system functions run according to the expected results and have met the defined functional requirements. Black Box Testing verifies the input-output behavior of each function only; it does not show that the system is easier or faster to use than the manual process.

In addition to functional testing, performance and security testing of the website was also carried out. GTmetrix gave a Grade B with a Performance score of 77% and a Structure score of 84%, with a Largest Contentful Paint of 2.1 s, a Total Blocking Time of 0 ms, and a Cumulative Layout Shift of 0. Google PageSpeed Insights (Lighthouse) gave 99 for Performance, 86 for Accessibility, 100 for Best Practices, and 83 for SEO. The higher performance score probably reflects differences in test location, throttling, and Lighthouse version. Both tools measure a single load of the home page, so they indicate acceptable loading performance but not scalability under load or with concurrent users.

Security testing with Mozilla Observatory gave a grade of B with a score of 75/100, with 8 of 10 tests passed in the first scan and 10 of 12 in a repeated scan in October 2026 (the Observatory now runs 12 tests). Most recommended HTTP security configurations are therefore in place, and the two tests that were not passed indicate configuration items that can be hardened. This scan covers configuration only; it is not a penetration test or a vulnerability analysis.

Next, User Acceptance Testing (UAT) was carried out at the Cutover stage to evaluate the level of user acceptance of the developed system. Testing was carried out on 10 usage scenarios with seven participants (three Admin users and four Client users), covering the use cases of ordering, payment confirmation, content draft and revision management, invoice issuance, up to consultation and recap reports. A summary of the UAT results is shown in Table 5.

Table 5. Summary of User Acceptance Testing (UAT) Results

No	Use Case	Result
1	Service ordering (Client)	Successful
2	Payment confirmation	Successful
3	Content draft & revision	Successful
4	Content approval	Successful
5	Invoice generation	Successful
6	Order status monitoring	Successful
7	Registration & login	Successful
8	Order management (Admin)	Successful
9	Consultation	Successful
10	Recap report (Admin)	Successful

Source: (Research Results, 2026)

All UAT scenarios were declared Successful by the seven participants (23 of 23 executions), a 100% success rate, which indicates that the tested functions can be completed by both Admin and Client users. Because the checklist measures task completion rather than satisfaction, this result supports functional acceptance but not, on its own, a conclusion about overall user satisfaction.

Relation to the problems at Larka House Jakarta

Table 2 links each problem identified at Larka House Jakarta to the feature that addresses it. The risk of losing order information is reduced because every order, payment proof, content draft, and invoice is stored in one database instead of chat histories, and transaction history can be retrieved directly by Admin and Client. Revision requests are attached to the specific draft, which keeps the revision history together with the order. Creating an invoice took approximately 4 to 10 minutes manually in Canva (an approximate estimate by the agency staff), whereas the system generates it in less than 10 seconds after the final step is submitted, and invoicing no longer depends on the admin remembering to create it. Ordering in the system takes longer than sending a chat message because the client must first enter the job details, a step that previously had to be conveyed through chat; this duration was not measured. Some problems are only partly solved: payment verification and order status updates remain manual, and the system has no automatic email notification.

Comparison with related studies

The UAT result is consistent with related RAD studies (Sondang, 2024; Rizal et al., 2022). The evaluation here is broader than in most of the studies compared in Table 1: those studies reported Black Box Testing, usability questionnaires, or

interviews with one to fifteen participants (Setiawan et al., 2023; Rizal et al., 2022; Apriyana & Nasrul, 2025; Fadhliansyah et al., 2025) and, to our reading, did not report tool-based performance or security tests. They did, however, measure aspects that this study measured only approximately: Primanda and Fajri (2024) reported that order processing time fell by 45%, and Fadhliansyah et al. (2025) reported orders completed in 1 to 2 minutes based on customer interviews, whereas this study reports only an approximate invoice time and used a task-completion checklist instead of a satisfaction questionnaire. The distinguishing feature of this study is the combination of client-side content revision and approval with approval-triggered invoicing in one flow for a social media agency.

Limitations

The system has several limitations. It was evaluated at a single agency with a small group of users (seven UAT participants: three agency staff, including the researcher, as Admin users, and the owner and three acquaintances of the researcher as Client users), so the participants were not independent of the researcher and the findings cannot be generalized to other agencies without further testing, although the design of the order-revision-invoice flow can be adapted by similar small service businesses. The UAT sample is small, but comparable with related studies that tested with one to five participants (Setiawan et al., 2023; Rizal et al., 2022; Apriyana & Nasrul, 2025). The UAT checklist measures task completion, not satisfaction, and no usability questionnaire was used. The system depends on internet connectivity and on a shared hosting service, which constrains availability, scalability, and backup options. Performance was tested only with GTmetrix and PageSpeed Insights, without load or concurrent-user testing, and security was assessed only through configuration scanning, without penetration testing. Usability, reliability, and maintainability were not measured systematically, and the comparison with the manual process is limited to an approximate invoice time. Finally, long-term maintenance (hosting costs, framework updates, and data backup) remains the responsibility of the agency.

CONCLUSION

Based on the research results and discussion above, the design and implementation of the social media agency service ordering information system at Larka House Jakarta has been successfully realized as a website-based application using the CodeIgniter 4 framework and a MySQL database with the Rapid Application Development (RAD) method. The system provides an official and structured ordering channel for clients, replacing the ordering process that previously could only be done via WhatsApp and Instagram Direct Message, and is equipped with an automatic invoice generation feature that is activated when all content drafts have been approved by the client, thereby eliminating dependence on manual invoice creation using Canva. All order data, payment history, content drafts, and invoices are stored centrally in a single database, replacing the data tracing process that previously had to be done through chat histories on various communication platforms, while the order status monitoring page allows clients to see work progress directly without having to ask via short messages. Black Box Testing on 15 scenarios resulted in a Valid status for all scenarios, and User Acceptance Testing on 10 usage scenarios showed a 100% success rate, which indicates that the system met the defined functional requirements and that Admin and Client participants could complete all tested scenarios. The main contribution of this research is the integration of service ordering, content revision and approval, payment confirmation, order monitoring, and automatic invoice generation in one system. It directly addresses the risk of losing order information, the lack of transaction history, and manual invoicing at Larka House Jakarta, where invoice creation that took approximately 4 to 10 minutes manually now takes less than 10 seconds. The study is limited to a single case, a small UAT sample (seven participants), and basic performance and security checks. Future research could conduct load and penetration testing, evaluate usability with a standard questionnaire and a larger sample, measure ordering and invoicing time systematically, test the system in other agencies, and consider adding automatic email notifications, applying a user interface design that is more adaptive to mobile devices, and integrating a social media content performance analytics feature using the application programming interfaces (APIs) of Instagram, TikTok, and Facebook to expand the functional scope of the system in subsequent research.

REFERENCE

Ali, I., Ghaniy, A. H., & Fernandy, H. (2022). Pengembangan Learning Management System sebagai pembelajaran berempati di media sosial berbasis framework Ruby on Rails menggunakan metode RAD. *Jurnal Teknologi Informatika dan Komputer, 8*(2), 375–385. https://doi.org/10.37012/jtik.v8i2.1132

Anshori, A. I., Falah, M. N., Aisah, S., & Wulandari, U. M. (2025). Implementasi metode Rapid Application Development (RAD) pada sistem informasi perpustakaan berbasis web di SMK Nusantara 1 Comal. *RIGGS: Journal of Artificial Intelligence and Digital Business, 4*(3), 1648–1654. https://doi.org/10.31004/riggs.v4i3.2208

Apriyana, A., & Nasrul. (2025). Pengembangan sistem skrining kesehatan berbasis web dengan metode Extreme Programming di STT-NF. *Journal of Digital Business and Technology Innovation (DBESTI), 2*(2), 215–223. https://journal.nurulfikri.ac.id/index.php/DBESTI

Fadhliansyah, A., Wibowo, E., & Panji, K. (2025). Perancangan sistem pemesanan makanan berbasis web pada UMKM dengan framework Laravel. *Journal of Digital Business and Technology Innovation (DBESTI), 2*(2), 246–251. https://journal.nurulfikri.ac.id/index.php/DBESTI

Nasril, & Adhitya, D. (2025). Rancang bangun sistem informasi LP3I Student Care Center berbasis web pada Politeknik LP3I Jakarta Kampus Depok. *Jurnal Lentera ICT, 10*(2), 92–105. https://doi.org/10.34127/jrict.v10i2.1923

Padeli, & Kholid, F. N. (2026). Development of a web-based digital service ordering and management system. *Journal SENSI, 12*(2), 192–200. https://doi.org/10.33050/sensi.v12i2.4533

Poetra, M. I. L., Hafid, R., Bahsoan, A., Bumulo, F., & Dama, M. N. (2025). Penggunaan media sosial dalam meningkatkan penjualan usaha kecil menengah di Pasar Sentral Kota Gorontalo. *Oikos Nomos: Jurnal Kajian Ekonomi dan Bisnis, 18*(2), 89–99. https://doi.org/10.37479/jkeb.v18i2.37665

Primanda, A. G., & Fajri, I. N. (2024). Perancangan sistem informasi pemesanan berbasis web di Restoran Pawon Jinawi. *IJAI (Indonesian Journal of Applied Informatics), 9*(1), 64–79. https://doi.org/10.20961/ijai.v9i1.93524

Rizal, K., Alkhalifi, Y., Fibriany, F. W., & Rachmawaty, Z. (2022). Rancang bangun sistem informasi pemesanan jasa event organizer berbasis website menggunakan metode RAD. *Jurnal Teknik Komputer AMIK BSI, 8*(1), 7–14. https://doi.org/10.31294/jtk.v4i2

Setiawan, W., Putra, A. D., & Permata, P. (2023). Sistem informasi pemesanan jasa percetakan berbasis web (Pada CV Mitra Jaya). *Jurnal Informatika dan Rekayasa Perangkat Lunak, 4*(1), 113–118. https://doi.org/10.33365/jatika.v4i1.2464

Sondang. (2024). Penerapan metode RAD dalam pengembangan sistem informasi pemesanan jasa percetakan berbasis web pada Percetakan Karya Sehati Jaya. *REMIK: Riset dan E-Jurnal Manajemen Informatika Komputer, 8*(3), 871–881. https://doi.org/10.33395/remik.v8i3.13944

Supriatiningsih, Mulyanto, J. D., Sutrisno, & Safira, B. A. (2023). Perancangan sistem informasi pembuatan konten media sosial PT. Bikin Kreatif Digital Agency Purwokerto. *Informatics and Computer Engineering Journal (IJEC), 3*(1), 59–65. https://jurnal.bsi.ac.id/index.php/ijec/

We Are Social & Meltwater. (2026). *Digital 2026: Indonesia*. DataReportal.

Zulkarnaini, Firdhayanti, A., Taufik, T., & Bachry, B. (2023). User acceptance testing through blackbox evaluation for corn distribution information system. *Bit-Tech, 6*(2), 208–215. https://doi.org/10.32877/bt.v6i2.1065