

Design and Implementation of Coffeeshop Management System Prototype Using Rapid Application Development

Yerik Afrianto Singgalen

Faculty of Business Administration and Communication, Tourism Study Program, Atma Jaya Catholic University of Indonesia, Jakarta, Indonesia

Jl. Jend. Sudirman No.51 5, RT.004/RW.4, Karet Semanggi, Kecamatan Setiabudi, Kota Jakarta Selatan, Daerah Khusus Ibukota Jakarta, Indonesia

Email: yerik.afrianto@atmajaya.ac.id

Correspondence Author Email: yerik.afrianto@atmajaya.ac.id

Submitted: 01/04/2024; Accepted: 30/04/2024; Published: 30/04/2024

Abstract—This research focuses on designing and implementing a coffee shop management system using the Rapid Application Development (RAD) methodology. Through meticulous planning, user-centric design, and rigorous testing, the system addresses the specific operational needs of coffee shops, including supplier management, inventory tracking, sales analysis, employee scheduling, and the optimization of coffee shop management through digital systems. Following the RAD methodology, the prototype design undergoes iterative stages such as requirement planning, user design, construction, and cutover. Integrating Geographic Information Systems (GIS) enhances functionality by providing spatial visualization of supplier and staff locations. Additional features such as menu management and equipment maintenance tracking contribute to operational efficiency. This study underscores the importance of technological solutions in streamlining coffee shop operations and optimizing decision-making. Future research will focus on refining the system based on user feedback and evolving business requirements to ensure its effectiveness.

Keywords: RAD; Coffeeshop; Supplier; Database; Information System

1. INTRODUCTION

The food and beverage industry is a cornerstone of the economic support system for tourism in a given region. As the primary purveyor of culinary experiences, it catalyzes attracting visitors, thereby contributing substantially to the local economy [1], [2]. Moreover, the industry facilitates preserving and promoting cultural heritage through traditional cuisines and culinary practices, enriching the tourism experience [3]–[5]. Furthermore, fostering the growth of ancillary services such as hospitality and entertainment generates a multiplier effect, amplifying economic benefits [6]–[9]. Hence, it is evident that the food and beverage sector not only sustains but also propels the economic viability of tourism, making it indispensable for regional development and prosperity.

Implementing robust management systems and effective monitoring mechanisms is imperative for business governance to enhance coffee shops' performance. Establishing efficient managerial protocols ensures streamlined operations, optimal resource allocation, and adherence to industry standards, thereby fostering sustainability and growth [10]–[12]. Additionally, diligent monitoring facilitates real-time assessment of performance metrics, enabling timely interventions and strategic adjustments to capitalize on opportunities and mitigate risks [13], [14]. Consequently, a well-structured management and monitoring framework is essential for optimizing coffee shop ventures' operational efficiency and overall success, underscoring its significance in contemporary business practices.

Specifically, a comprehensive system must accommodate the management of suppliers, inventory, menus, employees (baristas), and sales data. A sophisticated system facilitates seamless coordination with suppliers, ensuring timely replenishment of stock and maintaining product quality standards [15]–[17]. Moreover, it enables efficient inventory management, minimizing wastage and optimizing resource utilization [18]–[21]. Additionally, the system enhances workforce productivity and satisfaction by integrating employee scheduling, training records, and performance evaluations [1], [22]–[24]. Consequently, implementing a tailored management system is paramount for optimizing operational efficiency and maximizing profitability in the dynamic environment of coffee shop businesses.

This research aims to design a data warehouse as a management information system and monitoring tool for coffee shop business activities. By implementing a data warehouse, comprehensive and real-time data on supplier transactions, inventory levels, menu preferences, employee performance, and sales trends are efficiently stored and analyzed. Such a system enables informed decision-making, proactive problem-solving, and strategic planning, ultimately enhancing operational efficiency and competitiveness in the coffee shop industry [25], [26]. In conclusion, developing a data warehouse as a management information system is crucial to achieving optimal performance and sustainability in coffee shop businesses.

The urgency of this research lies in addressing the pressing need for advanced management information systems tailored to the specific requirements of coffee shop businesses. With the rapid evolution of consumer preferences and market dynamics, there is a critical demand for innovative solutions to enhance operational efficiency and competitiveness in the industry [27]. By developing a data warehouse as a comprehensive management information system, this research endeavors to fill a significant gap in current practices, enabling

coffee shop owners and managers to make data-driven decisions, optimize resource utilization, and capitalize on emerging opportunities [28]. In conclusion, the timely execution of this research is paramount in navigating the complexities of the coffee shop business landscape and ensuring long-term success and sustainability.

The method employed in the system's design is Rapid Application Development (RAD), a structured approach emphasizing iterative development and prototyping. This methodology accelerates the system development process by involving end-users early and facilitating rapid feedback loops, ensuring alignment with business needs and requirements [29]–[31]. By leveraging RAD, the design team swiftly identifies and addresses potential issues, iteratively refining the system to meet evolving demands and specifications. Consequently, adopting RAD enables efficient system development and deployment, ultimately enhancing agility and responsiveness in meeting the dynamic demands of coffee shop business operations. In conclusion, the utilization of RAD methodology represents a strategic choice in expediting the development of the system while ensuring its alignment with user needs and business objectives.

This research's theoretical and practical implications extend to academia and industry, fostering advancements in management information systems theory and enhancing operational efficiency in coffee shop businesses. Integrating a data warehouse as a management information system facilitates the application of contemporary theories in information management, contributing to the scholarly discourse on innovative solutions for small business operations [32]. Moreover, in practical terms, implementing such a system holds promise for coffee shop owners and managers, offering actionable insights derived from comprehensive data analysis to optimize decision-making processes and improve business performance [22]. Thus, this research enriches theoretical knowledge and provides tangible benefits to stakeholders in the coffee shop industry, underscoring its significance in academia and practice.

The similarity with prior research lies in the focus on developing systems for managing supplier relations, menu customization, employee management, and sales tracking through the Rapid Application Development (RAD) methodology. This aligns with the trend in contemporary literature towards leveraging agile methodologies for system development in various business contexts [32], [33]. However, the limitations of this research primarily revolve around the scope of the RAD approach, which may not fully address the complexity of certain business processes or adequately accommodate specific industry nuances. Thus, while RAD offers expedited development cycles and user involvement, its suitability for comprehensive and nuanced systems in the coffee shop domain warrants further exploration and consideration of alternative methodologies.

2. RESEARCH METHODOLOGY

2.1 Gap Analysis

Gap analysis is conducted to identify theoretical discrepancies from similar studies that accommodate coffee shop business processes through information systems within the RAD methodology. This methodological scrutiny aims to pinpoint areas where prior research may have overlooked or inadequately addressed specific aspects of coffee shop operations, such as inventory management, menu customization, employee scheduling, and sales tracking. By systematically assessing these gaps, this research delineates avenues for further investigation and refinement, thus enhancing the comprehensiveness and applicability of future studies in this domain. Consequently, through diligent gap analysis, this research advances knowledge and practice in coffee shop management and information systems development within the RAD framework.

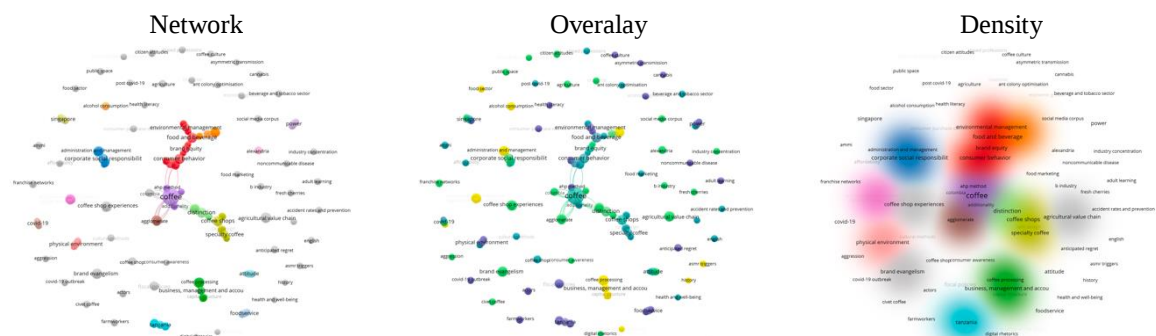


Figure 1. Gap Analysis using VosViewer

Figure 1 shows the gap analysis using Vosviewer. Based on the results of gap identification in the topic of coffee shop management systems, it is discernible that there exists a correlation between studies on the food and beverage industry and coffee shop business and management. This correlation underscores the interconnectedness of coffee shop operations with broader trends and practices within the food and beverage sector, encompassing aspects such as supply chain management, consumer behavior analysis, and marketing strategies. Consequently, recognizing and exploring this relationship enriches our understanding of coffee shop management's unique

challenges and opportunities, informing more effective business success and sustainability strategies. In conclusion, acknowledging this interrelation emphasizes the importance of integrating insights from both domains to optimize coffee shop operations and enhance industry performance.

2.2 Rapid Application Development

The design of an application for a coffee shop management system utilizing Rapid Application Development (RAD) encompasses several key stages, including requirement planning, user design, construction, and cutover. Requirement planning involves gathering and analyzing the specific needs and objectives of the coffee shop and identifying functionalities and features essential for efficient management. Subsequently, the user design phase focuses on creating intuitive interfaces and user-friendly interactions tailored to the needs of coffee shop staff and managers, ensuring ease of use and accessibility. Following this, the construction phase involves the actual development of the application, utilizing RAD's iterative approach to produce prototypes and quickly incorporate feedback for rapid refinement. Finally, the cutover phase entails transitioning to the new system, including data migration, staff training, and implementation support to ensure a smooth integration into daily operations. In conclusion, the systematic application of RAD methodology in each stage of the application design process facilitates the efficient development and deployment of a robust coffee shop management system catering to the industry's specific needs.

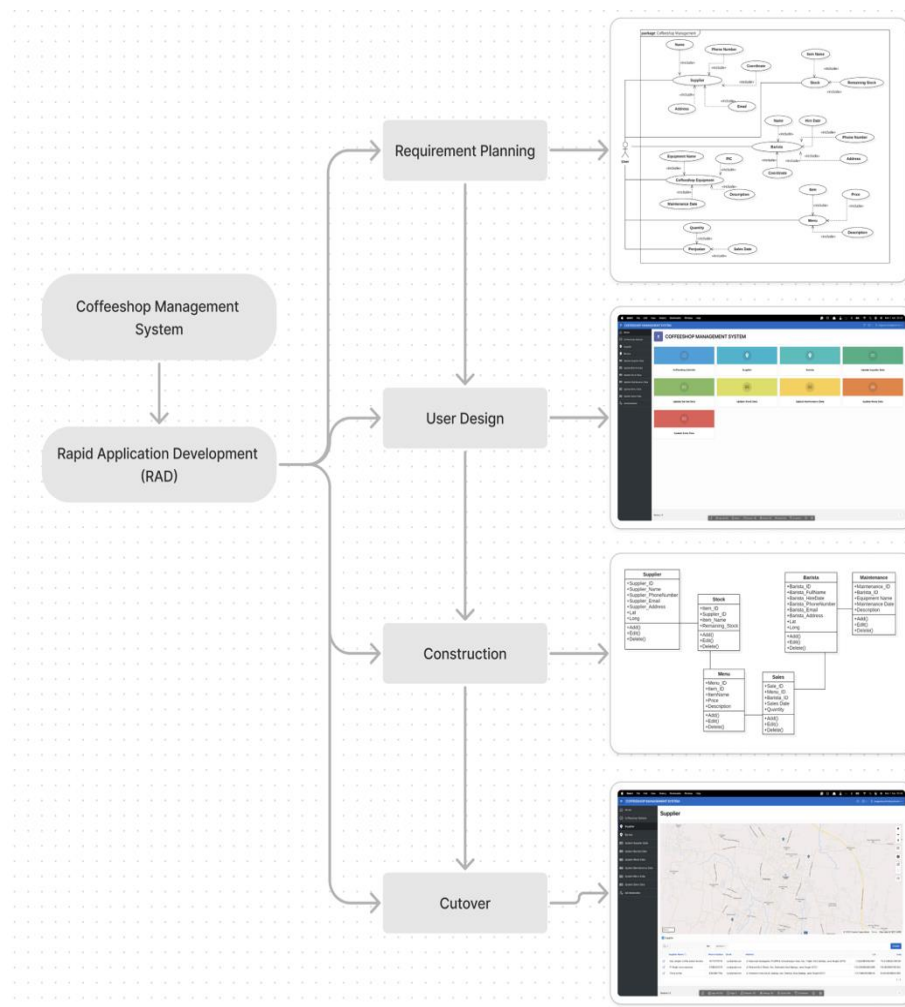


Figure 2. Rapid Application Development (RAD) in Coffeeshop Management System Design

Figure 2 shows the implementation of RAD in system design and implementation. The implementation of Rapid Application Development (RAD) has meticulously considered the relevance, effectiveness, and efficiency of system design. By prioritizing iterative development cycles and continuous user feedback, RAD ensures that the resulting system remains aligned with evolving business requirements and industry standards, enhancing its relevance and applicability. Moreover, the RAD methodology's emphasis on rapid prototyping and iterative refinement fosters the creation of systems that are effective in addressing core business needs and efficient in terms of development time and resource utilization. Consequently, through the conscientious application of RAD principles, the implementation process maximizes the value delivered by the system while minimizing time-to-market and overall project costs, ultimately solidifying its position as a pragmatic approach to system development.

2.2.1 Requirement Planning

Data needs are identified during the requirement planning phase for the coffee shop management process. Based on the outcomes of this identification, it becomes apparent that the required data is intertwined with supplier information, barista (employee) records, stock details, menu specifications, sales statistics, and equipment maintenance records. This comprehensive understanding of data requirements lays a solid foundation for the subsequent system design and development stages. This ensures that the resulting application effectively captures and utilizes essential information for optimal coffee shop operations. Thus, the meticulous analysis of data needs at the requirement planning stage is a crucial precursor to successfully implementing the coffee shop management system.

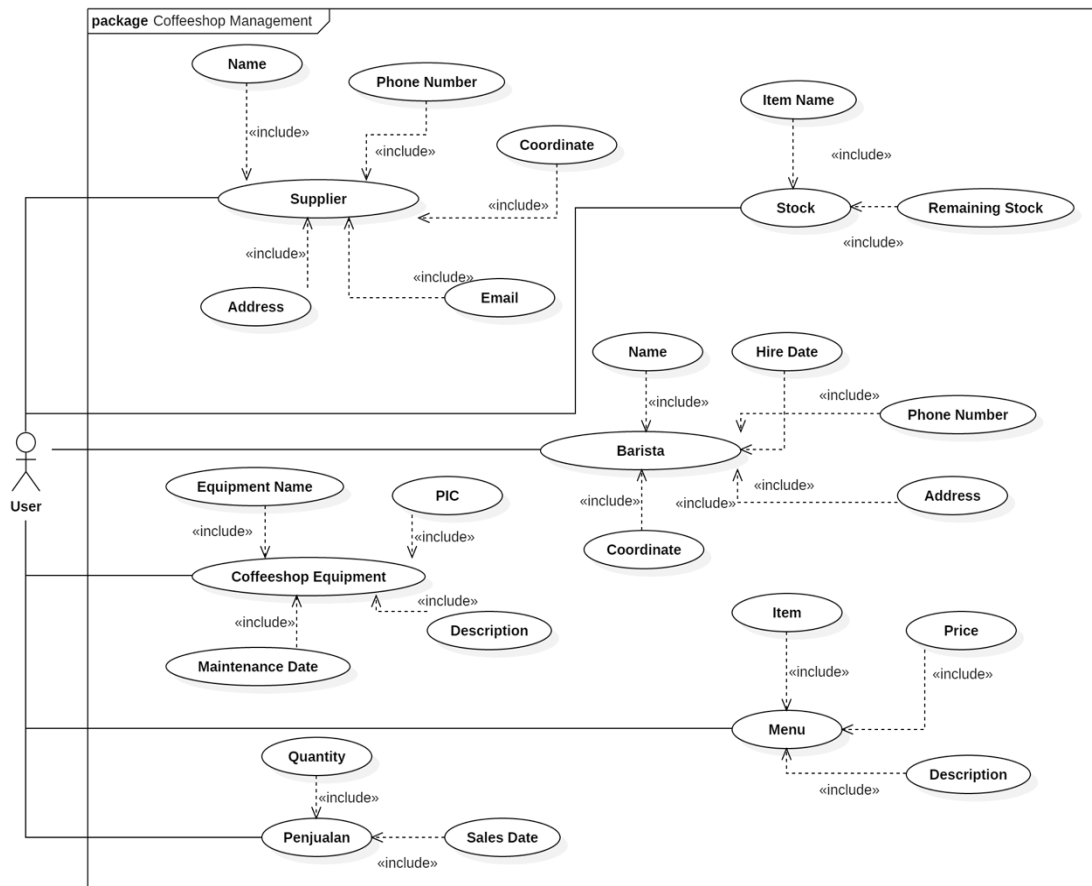


Figure 3. Use Case of Coffeeshop Management System

Figure 3 shows the use case of the coffee shop management system. A use case diagram is crafted to streamline the process of identifying data requirements related to suppliers, baristas (employees), stock information, menus, sales statistics, and equipment maintenance records. This graphical representation offers a visual depiction of various interactions between system users and the functionalities they require, aiding in the comprehensive understanding of data needs within the coffee shop management system. By delineating specific use cases and their associated data requirements, the diagram facilitates effective communication between stakeholders and developers, ensuring that the resulting system aligns closely with business objectives and operational necessities. Thus, the use case diagram serves as a valuable tool in guiding the design and development of the coffee shop management system, ultimately enhancing its functionality and usability for all stakeholders involved.

2.2.2 User Design

During the user design phase, the application's interface is crafted in alignment with data requirements, ensuring it is visually appealing and readily comprehensible to users. This stage prioritizes the creation of an intuitive and user-friendly interface that facilitates seamless interaction with the system while effectively presenting the necessary data. By incorporating user feedback and best design practices, the resulting interface optimizes user experience. It enhances usability, ultimately contributing to the overall effectiveness and acceptance of the coffee shop management system. Hence, meticulous attention to user design enhances user satisfaction and ensures efficient data utilization within the application, reinforcing its value in supporting coffee shop operations.

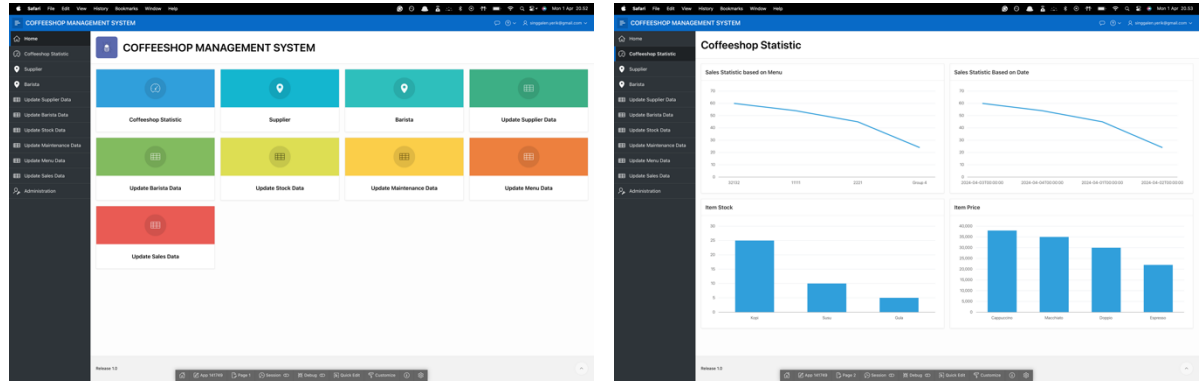


Figure 4. User Interface Design on Oracle-Apex

Figure 4 shows the result of the user-interfaced design on Oracle Apex. Based on the interface design outcomes, the arrangement of pages in the application primarily features a dashboard showcasing statistical data related to sales, stock levels, and item pricing. This layout prioritizes the presentation of essential information in a concise and easily accessible format, allowing users to quickly grasp key performance indicators and make informed decisions regarding inventory management, pricing strategies, and sales optimization. By centralizing critical data on a dashboard interface, the application enhances user efficiency and effectiveness in monitoring and analyzing coffee shop operations, thereby contributing to overall business performance. Consequently, the strategic organization of dashboard pages reinforces the application's utility and value in facilitating data-driven decision-making processes within the coffee shop management system.

2.2.3 Construction

Database design is based on specific information and data required to optimize coffee shop management during construction. This stage involves structuring the database schema to efficiently store and manage essential data such as supplier details, inventory levels, menu items, sales transactions, and equipment maintenance records. By meticulously organizing the database architecture to accommodate the diverse data needs of coffee shop operations, the construction phase lays the foundation for a robust and scalable management system. This systematic approach ensures that the application effectively captures, processes, and utilizes data to support informed decision-making and streamline day-to-day activities within the coffee shop environment. Consequently, carefully constructing the database aligns with enhancing efficiency and effectiveness in coffee shop management.

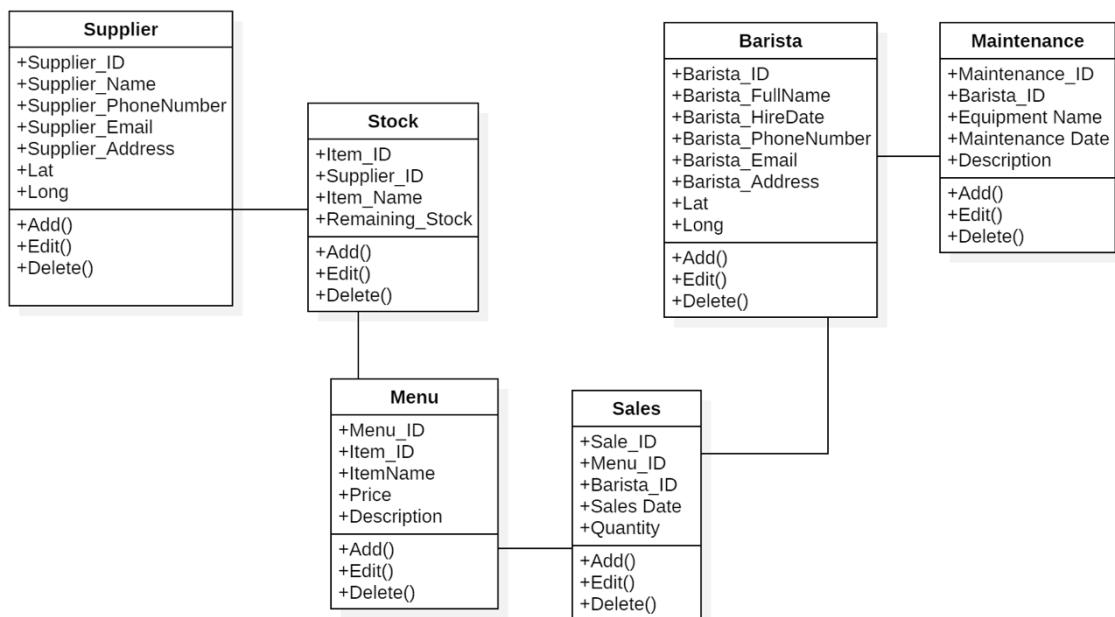


Figure 5. Class Diagram of Coffeeshop Management System

Figure 5 shows the class diagram of the coffee shop management system. Based on the class diagram, it is evident that the supplier table is associated with the stock table, the stock table is linked to the menu table, and the menu table is interconnected with the sales table. Similarly, the maintenance table is correlated with the barista

table, which is connected to the sales table. This structural arrangement highlights the interdependencies among various data entities within the coffee shop management system, elucidating the relationships necessary for seamless data management and efficient business operations. By delineating these connections through the class diagram, developers gain valuable insights into the system's underlying architecture, facilitating the implementation of cohesive and integrated functionalities. Thus, the class diagram is a pivotal tool in guiding the design and development of the database schema, ensuring coherence and effectiveness in managing coffee shop data.

2.2.4 Cutover

During the cutover phase, the application's performance is evaluated by identifying error logs and conducting tests on each page's create, read, update, and delete functions. This crucial step ensures the readiness of the coffee shop management system for deployment by assessing its functionality and reliability under real-world conditions. Through meticulous examination of error logs, developers pinpoint and address any technical issues or glitches that may impede system performance. Additionally, rigorous testing of essential functions across all application pages verifies their responsiveness and accuracy, validating the system's capability to support day-to-day operations effectively. Thus, the comprehensive evaluation during the cutover phase enhances the quality and readiness of the coffee shop management system for implementation, setting the stage for seamless integration into the operational environment.

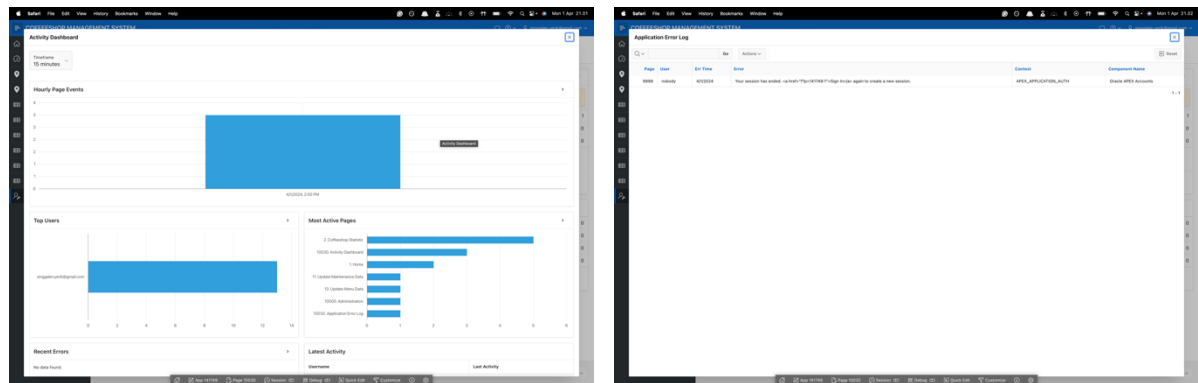


Figure 6. Activity Dashboard and Error Log of the Coffeeshop Management System

Figure 6 shows the coffee shop management system's activity dashboard and error log. Based on performance testing of the dashboard and individual pages, it is evident that the operator functions of create, read, update, and delete are functioning effectively. This validation underscores the successful implementation of essential functionalities within the coffee shop management system. This ensures that users seamlessly perform operations such as adding new data, retrieving information, modifying existing records, and efficiently removing outdated entries. The robust functionality of these operator functions enhances user productivity and system usability, contributing to coffee shop operations' overall efficiency and effectiveness. Hence, the positive outcomes of performance testing validate the functionality and readiness of the system for operational use.

3. RESULT AND DISCUSSION

The discussion in this research comprises two main topics: prototype design and implementation outcomes and the role of coffee shop management systems in the food and beverage industry. The first topic delves into the process and results of designing and implementing a prototype coffee shop management system, highlighting the methodology employed, key features developed, and the system's usability and functionality. The second topic explores the broader implications of such systems within the food and beverage industry, emphasizing their significance in enhancing operational efficiency, improving customer service, and driving business growth. By addressing these dual facets, the research provides comprehensive insights into the design, implementation, and impact of coffee shop management systems in the dynamic landscape of the food and beverage industry.

3.1 Design and Implementation of the Coffeeshop Management System Prototype

Statistical sales data is pivotal in documenting the profitability of the products and services sold in a coffee shop. Businesses gain valuable insights into consumer preferences, popular menu items, and revenue-generating opportunities by systematically recording and analyzing sales figures. Moreover, this data enables coffee shop owners and managers to make informed decisions regarding inventory management, pricing strategies, and marketing efforts, optimizing profitability and enhancing overall business performance. Consequently, the meticulous tracking and analysis of sales statistics are a fundamental component of effective business management in the coffee shop industry, facilitating strategic decision-making and sustainable growth.

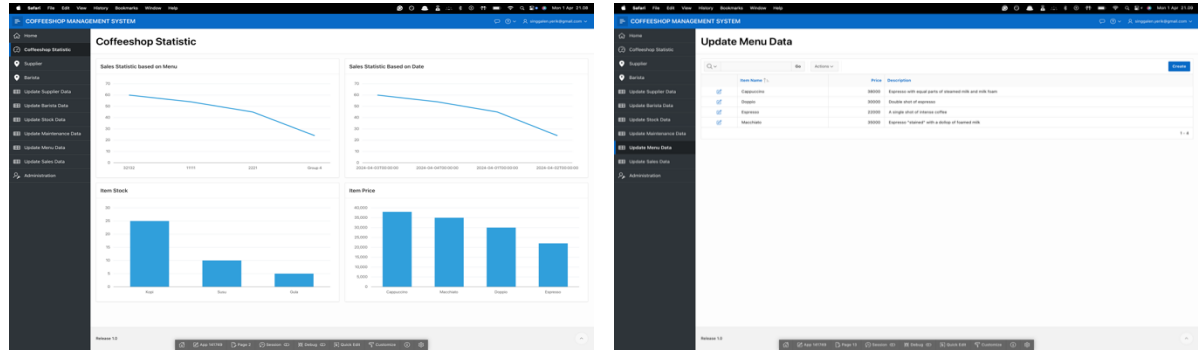


Figure 7. Dashboard of Coffeeshop Management System

Figure 7 shows the dashboard of the coffee shop management system. The coffee shop management system dashboard incorporates essential information about stock levels, pricing, and sales data categorized by date. This comprehensive data display is directly linked to the application's corresponding pages for menu management, stock tracking, and sales analysis. By providing a centralized and visually intuitive interface, the dashboard enables coffee shop owners and managers to swiftly access critical information, make informed decisions, and effectively monitor key performance metrics. Consequently, integrating such features enhances the efficiency and efficacy of coffee shop operations, facilitating streamlined management and optimized business performance.

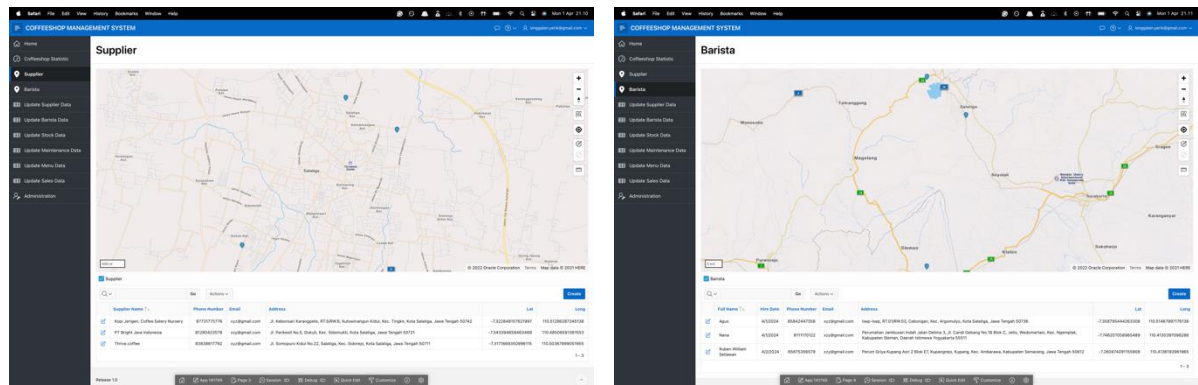


Figure 8. Supplier and Barista Page in the Application

Figure 8 shows the supplier and barista page in the coffee shop management system. Integrating supplier locations and barista addresses with Geographic Information Systems (GIS) inlets users visualize this information spatially on the supplier and barista pages. This integration enhances the usability and functionality of the coffee shop management system by providing users with a visual representation of supplier distribution and barista locations. By leveraging GIS technology, coffee shop owners and managers gain valuable insights into spatial patterns and optimize logistical operations such as supplier management and staff scheduling. Consequently, integrating GIS enhances the user experience and contributes to more informed decision-making in coffee shop management.

Furthermore, the coffee shop management system application also presents information concerning menus and a list of equipment requiring maintenance. This additional functionality enhances the comprehensiveness of the application by providing users with vital details regarding menu items available for sale and equipment upkeep requirements. By integrating menu and equipment maintenance information into the system, coffee shop owners and managers efficiently manage inventory, ensure menu availability, and schedule maintenance tasks to maintain operational efficiency. Thus, including these features contributes to the overall effectiveness and utility of the coffee shop management system in supporting day-to-day business operations.

Providing information regarding the remaining stock of raw materials facilitates baristas in maintaining sales performance by anticipating stock scarcity that affects coffee shop business processes. This data empowers baristas to make informed decisions regarding menu offerings and ingredient substitutions, mitigating potential service disruptions caused by depleted stock levels. By proactively managing stock availability, baristas uphold customer satisfaction and sustain revenue generation, ensuring smooth operations and fostering business continuity in the competitive coffee shop industry. Hence, the availability of stock information is a critical tool in enabling baristas to effectively navigate stock shortages and uphold the operational efficiency of the coffee shop.

3.2 Coffeeshop Management System and its implication in the Food and Beverage industry

Coffee shop management systems are crucial in the food and beverage industry. These systems streamline coffee shop operations, including inventory management, sales tracking, employee scheduling, and customer relationship



management. By providing efficient data analysis and decision-making tools, coffee shop management systems enhance operational efficiency, improve service quality, and contribute to business growth [34]. Moreover, they enable coffee shop owners to adapt to changing market demands, optimize resource utilization, and maintain a competitive edge in the dynamic food and beverage landscape [35]. Thus, integrating robust management systems drives success and sustainability within the coffee shop sector, underscoring their indispensable role in the broader food and beverage industry.

Optimizing business processes through digital systems significantly enhances the profitability of coffee shops. By leveraging digital technology, coffee shop owners streamline operations such as inventory management, sales tracking, and customer engagement, improving efficiency and cost-effectiveness. Additionally, digital systems enable data-driven decision-making, allowing coffee shop owners to identify trends, optimize pricing strategies, and target marketing efforts more effectively, ultimately driving revenue growth. As a result, adopting digital solutions holds immense potential for enhancing coffee shops' competitive advantage and long-term profitability in the evolving food and beverage industry landscape.

Through digital systems, coffee shop owners gain insights into the shortcomings and challenges of coffee shop business development, enabling them to make strategic decisions to sustain their business. These systems provide comprehensive data analytics and reporting tools that offer visibility into various aspects of the business, including sales performance, customer preferences, and operational efficiency. Armed with this valuable information, coffee shop owners identify areas for improvement, allocate resources effectively, and implement targeted strategies to overcome challenges and capitalize on opportunities. Consequently, integrating digital systems empowers coffee shop owners to navigate the industry's complexities confidently, driving long-term success and viability in the competitive market.

This research demonstrates that digital systems are crucial in optimizing coffee shop businesses. Owners streamline operations, improve efficiency, and make informed decisions by harnessing digital technologies such as coffee shop management software and data analytics tools. These systems enable effective inventory management, sales tracking, customer relationship management, and strategic planning, enhancing profitability and sustainability in the competitive coffee shop industry. As a result, integrating digital solutions emerges as a cornerstone for driving success and growth in coffee shop businesses, underscoring their significance in modern business operations.

4. CONCLUSION

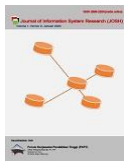
In conclusion, the research has yielded significant insights into designing and implementing a coffee shop management system using the Rapid Application Development (RAD) methodology. Through meticulous planning, user-centric design, and rigorous testing, the system has been successfully developed to address the specific needs of coffee shop operations, including supplier management, inventory tracking, sales analysis, and employee scheduling. Integrating Geographic Information Systems (GIS) further enhances the system's functionality by providing spatial visualization of supplier and staff locations. Additionally, menu management and equipment maintenance tracking contribute to coffee shop management's overall effectiveness and efficiency. This research underscores the importance of leveraging technological solutions to streamline business processes and optimize decision-making in the competitive coffee shop industry. Further refinement and optimization of the system based on user feedback and evolving business requirements will ensure its continued relevance and effectiveness in facilitating coffee shop operations.

ACKNOWLEDGMENT

I want to express my sincere gratitude to the Tourism Department, Faculty of Business Administration and Communication, Atma Jaya Catholic University of Indonesia, and the LPPM (Lembaga Penelitian dan Pengabdian kepada Masyarakat) for their invaluable support in the publication of this research.

REFERENCES

- [1] D. Fauzi, U. Purnamasari, S. A. Wicaksono, and C. Maharani, "When local customs meet the market: an analysis of coffee value chain in Tebat Benawa customary community, Indonesia," *Int. J. Agric. Sustain.*, vol. 21, no. 1, 2023, doi: 10.1080/14735903.2023.2231769.
- [2] M. Purnomo, Y. Yulianti, A. Shinta, and F. D. Riana, "Developing coffee culture among indonesia's middle-class: A case study in a coffee-producing country," *Cogent Soc. Sci.*, vol. 7, no. 1, 2021, doi: 10.1080/23311886.2021.1949808.
- [3] M. L. Baron and N. Aubourg, "Arabica or Robusta? Accounting for collective strategies within the coffee trade industry: the case of coffee merchants in Le Havre (France) between 1920 and 1954," *Bus. Hist.*, vol. 65, no. 8, pp. 1294–1312, 2023, doi: 10.1080/00076791.2020.1825691.
- [4] X. F. Quiñones-Ruiz and C. A. Salcedo-Montero, "Green or roasted coffee? How a collective of organic producers challenges the quality construction by overseeing quality attributes, relational approaches and knowledge," *Int. J. Agric. Sustain.*, vol. 21, no. 1, 2023, doi: 10.1080/14735903.2023.2247808.
- [5] A. Tunarosa, P. Le, and C. Pradies, "Running on coffee: Paradox persistence in the US coffee industry, 1910–2020,"



- Bus. Hist., vol. 0, no. 0, pp. 1–30, 2024, doi: 10.1080/00076791.2024.2310513.
- [6] K. V. Bletzer, “Food and eating in Mexican American agrarian novels: cultivating a culture of sustenance hospitality in public literature,” *Food, Cult. Soc.*, vol. 24, no. 4, pp. 562–578, 2021, doi: 10.1080/15528014.2021.1884401.
- [7] D. S. Fowler, “Impact of COVID-19 on the global hospitality industry: a brief review of current academic literature and meta-analysis to determine primary qualitative themes,” *Res. Hosp. Manag.*, vol. 12, no. 1, pp. 29–34, 2022, doi: 10.1080/22243534.2022.2080948.
- [8] B. Okumus, “A meta-analysis of evolution of gastronomy and culinary education research published in top-tier culinary, hospitality, and tourism journals,” *J. Foodserv. Bus. Res.*, vol. 24, no. 1, pp. 101–120, 2021, doi: 10.1080/15378020.2020.1865775.
- [9] M. Kim and J. Jang, “The effect of physical environment of the employee break room on psychological well-being through work engagement in the hospitality industry,” *J. Hum. Resour. Hosp. Tour.*, vol. 21, no. 2, pp. 175–196, 2022, doi: 10.1080/15332845.2022.2031606.
- [10] W. Chiengkul and J. Junla, “Have you been falling in love?: An analysis of coffee shop brand love in Thailand,” *J. Foodserv. Bus. Res.*, vol. 27, no. 1, pp. 61–86, 2023, doi: 10.1080/15378020.2023.2229577.
- [11] D. Ünan Gökten and T. Uslu, “Examining the prominent components of the emerging specialty coffee sector in Turkey,” *Food, Cult. Soc.*, vol. 25, no. 1, pp. 126–148, 2022, doi: 10.1080/15528014.2021.1884441.
- [12] N. E. Gurmessa, C. Ndinda, C. Agwanda, and M. Akiri, “Partial credit guarantee and financial additionality for smallholders coffee cooperatives: experience from Ethiopia,” *Dev. Pract.*, vol. 32, no. 8, pp. 1049–1062, 2022, doi: 10.1080/09614524.2021.1958161.
- [13] S. K. Dixit, R. Garibaldi, and V. Gupta, “Special issue on food and beverage tourism: management and marketing perspectives,” *J. Foodserv. Bus. Res.*, vol. 25, no. 6, pp. 623–629, 2022, doi: 10.1080/15378020.2022.2139793.
- [14] J. Antony et al., “Total Quality Management & Business Excellence Application of Taguchi design of experiments in the food industry : a systematic literature review a systematic literature review,” *Total Qual. Manag.*, pp. 1–26, 2024, doi: 10.1080/14783363.2024.2331758.
- [15] O. T. K. Vu et al., “Coffee culture unravelled: exploring the coffee shop experience model in the Vietnamese context,” *Tour. Recreat. Res.*, vol. 0, no. 0, pp. 1–19, 2023, doi: 10.1080/02508281.2023.2295621.
- [16] S. Khatri, T. N. Bhusal, S. Kafle, A. Kafle, Y. R. Joshi, and K. R. Pandey, “Value chain analysis of arabica coffee (*Coffea arabica* L.) in Arghakhanchi district of Nepal,” *Cogent Food Agric.*, vol. 9, no. 1, 2023, doi: 10.1080/23311932.2023.2247173.
- [17] M. J. Botha, S. L. Middelberg, and M. Oberholzer, “Supply chain water-reporting practices in the food, beverage and tobacco sector: a comparative study,” *Water Int.*, vol. 47, no. 3, pp. 383–399, 2022, doi: 10.1080/02508060.2022.2039986.
- [18] V. M. Shandy, A. Mulyana, and B. Harsanto, “Social media richness, brand equity, and business performance: An empirical analysis of food and beverage SMEs,” *Cogent Bus. Manag.*, vol. 10, no. 2, 2023, doi: 10.1080/23311975.2023.2244211.
- [19] N. T. Hassen, M. Lema, and G. Nemera, “Financial and marketing approach to export performance: the mediation role of promotion and research and development,” *Cogent Bus. Manag.*, vol. 11, no. 1, p., 2024, doi: 10.1080/23311975.2024.2315658.
- [20] G. Hotessa Warie, A. T. Huluka, and E. U. Bariso, “Organizational innovation in the relationship between total quality management and business financial performance: case of coffee processing firms in Guji zone, Ethiopia,” *Cogent Bus. Manag.*, vol. 11, no. 1, p., 2024, doi: 10.1080/23311975.2024.2322689.
- [21] E. Astuty, I. D. Sudirman, and R. Aryanto, “Sustainable resilience strategy: unleash the micro-businesses’s potential in the digitalization and sustainability era,” *Cogent Bus. Manag.*, vol. 11, no. 1, p., 2024, doi: 10.1080/23311975.2024.2313672.
- [22] S. Candra, E. T. Pandean, J. Harisson, and S. Sutanto, “The Impact of Sensory Experience on the Buying Behavior of Coffee Shop Visitors in Indonesia,” *J. Int. Food Agribus. Mark.*, vol. 34, no. 2, pp. 214–234, 2022, doi: 10.1080/08974438.2022.2043980.
- [23] M. Suvattanadilok, “Market variables influence customer behavior toward coffee business growth,” *Cogent Bus. Manag.*, vol. 11, no. 1, p., 2024, doi: 10.1080/23311975.2024.2329242.
- [24] F. B. Georgise, B. B. Jarso, and A. T. Mindaye, “Model development for coffee processing plant location selection by using AHP method: Case of Guji Zone, Ethiopia,” *Cogent Bus. Manag.*, vol. 7, no. 1, 2020, doi: 10.1080/23311975.2020.1848110.
- [25] M. Ushada, R. Amalia, F. Trapsilawati, and N. A. S. Putro, “Group preference decision-making for the implementation of Industry 4.0 in food and beverage SMEs,” *Technol. Anal. Strateg. Manag.*, vol. 0, no. 0, pp. 1–18, 2022, doi: 10.1080/09537325.2022.2117600.
- [26] A. M. Thow et al., “The political economy of sugar-sweetened beverage taxation: an analysis from seven countries in sub-Saharan Africa,” *Glob. Health Action*, vol. 14, no. 1, 2021, doi: 10.1080/16549716.2021.1909267.
- [27] H. Weber, D. D. Loschelder, D. J. Lang, and A. Wiek, “Connecting consumers to producers to foster sustainable consumption in international coffee supply—a marketing intervention study,” *J. Mark. Manag.*, vol. 37, no. 11–12, pp. 1148–1168, 2021, doi: 10.1080/0267257X.2021.1897650.
- [28] B. Lewis-Whelan et al., “Welfare and Management of Civets in Civet Coffee Tourism Plantations,” *J. Appl. Anim. Welf. Sci.*, vol. 00, no. 00, pp. 1–14, 2023, doi: 10.1080/10888705.2023.2270414.
- [29] Y. A. Singgalen, “Implementation of Rapid Application Development (RAD) for Community-based Ecotourism Monitoring System,” *J. Inf. Syst. Res.*, vol. 5, no. 2, pp. 520–530, 2024, doi: 10.47065/josh.v5i2.4749.
- [30] Y. A. Singgalen, “Coastal and Marine Tourism Monitoring System Design using Rapid Application Development (RAD),” *J. Inf. Syst. Res.*, vol. 5, no. 2, p. 468–479, 2024, doi: 10.47065/josh.v5i2.4720.
- [31] Y. A. Singgalen, “Implementing Rapid Application Development (RAD) for Statistical Analysis of Tourism and Travel Vlog Content,” *J. Inf. Syst. Res.*, vol. 5, no. 2, pp. 562–572, 2024, doi: 10.47065/josh.v5i2.4787.
- [32] K. Nazmabadi and A. Motameni, “The chain coffee shop brand equity and the differences of the consumer segments’



- responses to its dimensions based on their brand usage frequency,” *J. Foodserv. Bus. Res.*, vol. 00, no. 00, pp. 1–31, 2022, doi: 10.1080/15378020.2022.2109373.
- [33] J. L. Fuller, I. van Putten, M. Kraan, M. Bjørkan, and D. J. Dankel, “‘Sustainability is not a vegan coffee shop.’ Eliciting citizen attitudes and perspectives to localize the UN sustainable development goals,” *J. Environ. Plan. Manag.*, vol. 0, no. 0, pp. 1–22, 2023, doi: 10.1080/09640568.2023.2223761.
- [34] W. Chiengkul, P. Mahasuweerachai, and C. Suttikun, “Why do self-identity and efficacy matter for enjoying participation in charity sports events? The role of the warm glow feeling,” *Int. J. Event Festiv. Manag.*, vol. 14, no. 1, pp. 92–112, Jan. 2023, doi: 10.1108/IJEFM-08-2022-0062.
- [35] O. Thi, K. Vu, A. D. Alonso, T. D. Tran, T. T. Nguyen, and G. J. Nicholson, “Examining the coffee consumption phenomenon in Vietnam through the structured experience lens,” *J. Foodserv. Bus. Res.*, vol. 00, no. 00, pp. 1–25, 2024, doi: 10.1080/15378020.2024.2336180.