

Franchisee Management System for 11 Nevada Management Group

Julia Bettina P. Dalipe, Matthew Rafael M. Florendo, Felipe Matteo D. Locsin, Brian Neil N. Salangasang,
and Marivic S. Tangkeko

*Center for ICT for Development (CITE4D) and Department of Information Technology,
College of Computer Studies - De La Salle University, 2401 Taft Avenue, 1004 Manila, Philippines*
**Corresponding Author: felipe_locsin@dlsu.edu.ph and marivic.tangkeko@dlsu.edu.ph*

Abstract: Franchising plays a crucial role in economic growth, particularly in the Philippines, where it contributes 7.8% of the GDP and provides employment to approximately 2 million individuals. Despite its significance, franchisee management remains a complex and multifaceted challenge, requiring effective oversight of contracts, inventory, workforce, and financial reporting. The COVID-19 pandemic further highlighted inefficiencies in franchise operations, reinforcing the need for digital transformation to streamline processes and enhance decision-making. This study focuses on the development of the Franchisee Management System (FMS) for 11 Nevada Management Group, designed to integrate automation, data analytics, and centralized reporting into franchise operations. The system is structured into five core modules: Franchising Agreement Monitoring, ensuring proper contract tracking and renewals; Inventory Management, providing real-time stock monitoring and replenishment alerts; Manpower Deployment, facilitating optimized workforce allocation and scheduling; Sales Performance Management, streamlining financial tracking and transaction encoding; and Report Generation with Analytics, consolidating data for strategic decision-making. The development of FMS involved stakeholder interviews, feasibility studies, and system analysis to align functionalities with the needs of franchise managers, business development officers, and operational teams. Implemented as a web-based application, FMS ensures data centralization, accessibility, and efficiency, replacing previously fragmented and manual processes. Beyond its current capabilities, future enhancements for FMS may include predictive analytics, third-party system integration, and AI-driven insights to optimize franchise operations further. By leveraging technology, the system contributes to franchise businesses' sustainability, scalability, and long-term competitiveness.

Key Words: Franchise Management; Business Automation; Workforce Optimization; Data Analytics; Web-Based System

1. INTRODUCTION

1.1 Background of the Study

Franchising drives economic growth by offering entrepreneurs access to established brands and proven business models. In the Philippines, it contributes 7.8% to the GDP and employs approximately 2 million individuals (International Trade Administration, n.d.). However, franchise operations are complex, requiring contract oversight, workforce allocation, inventory monitoring, and financial reporting. These challenges intensified during the COVID-19 pandemic, which led to significant losses for 79% of franchises (Desiderio, 2021). As investments rebound, operational efficiency and digital transformation have become more critical than ever (Manila Bulletin, 2022).

In this context, it is important to distinguish between franchisor companies that license their brand and system and franchisees, who invest in and operate those franchised businesses. While most existing systems focus on franchisors, helping them manage licenses and compliance, there is a noticeable lack of platforms designed for franchisees, especially those managing contracts with multiple franchisors.

11 Nevada Management Group is a franchise corporation with several franchises under their belt. This study addresses that gap by focusing on franchisee operations. Multi-brand franchisees must juggle diverse contract terms, reporting formats, and inventory systems across different brands. One such case is 11 Nevada Management Group, which operates different classifications under brands like Potato Corner, Macao Imperial Tea, and Auntie Anne's. Managing operations across these brands without a centralized system has resulted in inefficiencies and operational strain. The organization undergoes operations such as managing multiple contracts based on the franchises they have acquired, reporting a plethora of reports such as inventory reports, sales reports and the like, calculate and preview performance measures across all their franchises which was taken into consideration by the researchers.

This study explores the development of a Franchisee Management System (FMS) to integrate core functionalities such as contract monitoring, sales tracking, inventory management, and workforce deployment. By leveraging data analytics and automation, FMS aims to enhance operational transparency, reduce inefficiencies, and improve decision-making within franchise networks. The system offers a scalable solution to support business growth, empowering franchisees with real-time insights to maintain competitiveness in an evolving market.

1.2 Statement of the Problem

Franchisee management requires efficient handling of contracts, inventory, workforce scheduling, and financial reporting. However, 11 Nevada Management Group relies on manual and disconnected systems, resulting in missed contract renewals, stock mismanagement, staffing conflicts, and reporting errors. These inefficiencies hinder productivity, decision-making, and overall business performance.

Technology offers solutions to streamline operations, enhance decision-making, and improve resource management (Sabaran & Aziz, 2023). While digital solutions exist, they are largely designed for franchisors and do not meet the operational needs of franchisees managing multiple brands. This gap forces franchisees to adapt tools not built for their context, leading to further inefficiencies. A dedicated system is essential not only for resolving current issues but for supporting long-term growth and operational resilience.

1.3 Significance and Aim

This study aims to develop a Franchisee Management System (FMS) tailored to the needs of the 11 Nevada Management Group by addressing inefficiencies in contract monitoring, inventory tracking, manpower allocation, financial processes, and reporting. Integrating digital solutions enhances operational transparency and streamlines franchise management processes, ultimately improving decision-making and business sustainability.

The significance of this study aligns with Sustainable Development Goal (SDG) 9: Industry, Innovation, and Infrastructure, as it focuses on fostering technological advancement and efficient business operations within the franchising industry. Through automation and data analytics, the FMS modernizes franchise management, promoting innovation-driven solutions that enhance productivity, compliance, and financial stability. By implementing centralized reporting and analytics, franchise owners and managers gain real-time insights, ensuring better resource allocation and business growth.

By optimizing business processes and reducing manual workloads, the system empowers key stakeholders, including franchise owners, managers, and employees, to adapt more effectively to market demands. It supports digital transformation efforts that are essential for sustaining growth in a competitive and rapidly evolving business environment.

In doing so, the FMS also addresses a significant gap in the industry: the lack of digital tools specifically designed for multi-brand franchisee operations. It offers a viable prototype that supports franchisees in managing diverse franchising partnerships and lays the groundwork for future innovations. These may include enhanced collaboration platforms and integration tools that further strengthen the relationship between franchisees and franchisors.

1.4 Scope and Limitations

The Franchisee Management System (FMS) is designed specifically for franchisee corporations, particularly those managing operations across multiple franchisors. At 11 Nevada Management Group, the system will be used by HR specialists and operations managers to oversee contracts, inventory, manpower, finances, and reporting. Limited access may be granted to kiosk staff, with training required for specific modules. The system integrates with existing databases while ensuring data security and regulatory compliance.

The current scope focuses on kiosk-based

franchise operations such as Potato Corner, Macao Imperial Tea, and Auntie Anne's. It does not cover franchisor-specific functions like licensing or brand compliance enforcement. Limitations may arise due to IT infrastructure, data access, or branch-specific workflows. Although customized for 11 Nevada, the system's modular structure is adaptable to other multi-brand franchisee environments. Future development may include cost-benefit analysis and franchisor integration for broader applicability.

2. METHODOLOGY

The development of the Franchisee Management System adopted the Scrum framework as the software project management process due to its emphasis on iterative and incremental development. Scrum's approach of breaking tasks into smaller, manageable sprint cycles allowed the team to focus on specific system modules, ensuring structured and efficient development. By fostering collaboration and adaptability, the team was able to respond to evolving requirements while maintaining steady progress throughout the project. Regular meetings, sprint backlogs, and prioritized task lists ensured the team remained aligned with project goals.

The system's development was organized into six sprint cycles, each addressing a core module of the system. These included the Franchise Management Module, Inventory Module, Manpower Module, Sales Module, and Analytics Dashboard. Each sprint cycle focused on refining a specific module, ensuring that stakeholder requirements were met. This modular approach not only simplified development but also allowed for incremental testing and improvement, enabling the team to deliver a functional and cohesive system.

To support implementation, the team used Visual Studio Code for development, GitHub for version control, and MySQL for efficient database management. XAMPP was used to host backend services, enabling real-time data handling. These tools ensured code quality, version tracking, and system scalability.

The system design was informed by a needs assessment conducted through interviews and workflow reviews at 11 Nevada Management Group. Key pain points such as stock replenishment delays, missed contract renewals, and scattered reporting were prioritized in the system's design. A comparative analysis of franchisor-centric platforms revealed the lack of franchisee-focused solutions, which shaped the development of features tailored to multi-brand franchisee operations.

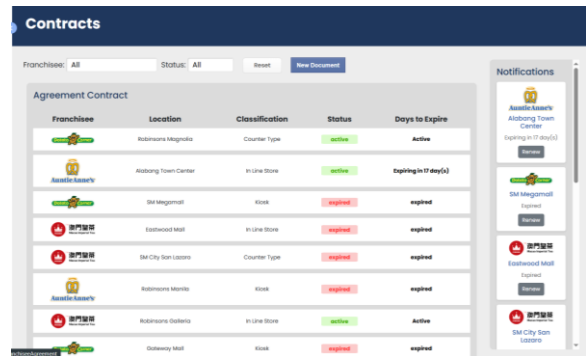
While a full cost-benefit analysis was beyond the current scope, early stakeholder feedback highlighted potential long-term gains in operational efficiency, staffing optimization, and contract compliance. Future studies may quantify these benefits to assess the system's long-term financial impact.

The FMS also drew insights from existing platforms to enhance functionality. Business analytics features were adapted from Franchise Management Systems; inventory workflows were inspired by retail platforms like Shopify; and workforce features were influenced by tools like Teramind. These integrations helped ensure the system's relevance to franchisee contexts while addressing gaps in existing solutions.

3. RESULTS AND DISCUSSION

The Franchisee Management System (FMS) for 11 Nevada Management Group is a comprehensive digital solution designed to optimize franchise operations. Through five (5) key modules: Franchising Agreement Monitoring, Inventory Management, Manpower Deployment, Sales Performance Management, and Report Generation with Analytics, it facilitates contract management, inventory tracking, manpower deployment, sales monitoring, and data-driven reporting. By enhancing operational efficiency, ensuring compliance, and providing real-time insights, the system supports franchise owners and managers in making informed decisions and improving overall business performance.

The Franchising Agreement Monitoring Module simplifies contract management by displaying active agreements, expiration timelines, and renewal alerts. Users can access detailed contract information, create new agreements, and renew existing ones directly from the dashboard, ensuring compliance and reducing manual tracking errors.



Franchisee	Location	Classification	Status	Days to Expire
Asiatik Assets	Robinsons Megamall	Counter Type	Active	Active
Asiatik Assets	Alibonang Town Center	In-Line Store	Active	Expiring in 17 day(s)
SM Megamall	SM Megamall	Work	Expired	expired
Asiatik Assets	Eastwood Mall	In-Line Store	Expired	expired
SM City San Lazaro	SM City San Lazaro	Counter Type	Expired	expired
Robinsons Manila	Robinsons Manila	Work	Expired	expired
Robinsons Galleria	Robinsons Galleria	In-Line Store	Active	Active
Outbunny Mall	Outbunny Mall	Work	Expired	expired

Fig. 1. Franchisee Agreement Monitoring Dashboard

The Sales Performance Module streamlines financial management by automating sales tracking and expense monitoring. It categorizes sales data by transaction type (Dine-In, Take-Out, and Delivery) and adjusts based on store classification. Users can view detailed sales reports, manually encode data, or upload CSV files for automatic entry. The Expenses feature allows for easy expense logging, while automated calculations ensure accurate revenue tracking and improved financial oversight.

The Inventory Management Module ensures real-time stock tracking and efficient supply chain management. It features an Inventory Overview for monitoring stock levels, a Stock Notification Panel for new branch stocking, and an Add Stock function for manual or CSV uploads. Area managers can record stock movements through the Daily Inventory form, while Daily Inventory Details provide a breakdown of stock activity, minimizing discrepancies and preventing shortages.

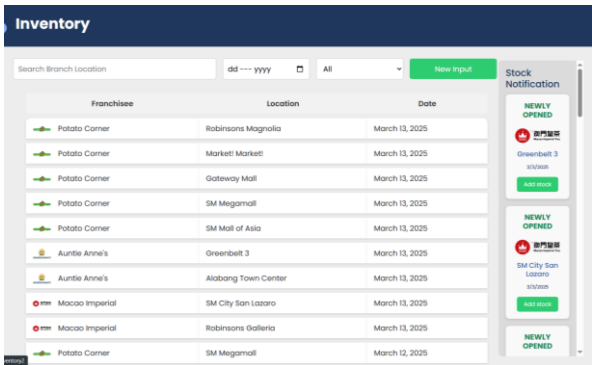


Fig. 2. Inventory Management Dashboard

The Manpower Deployment Module streamlines workforce management by tracking staffing levels and categorizing branches as Fully Staffed or Understaffed. Managers can view employee details, assign staff to branches, and add new hires with relevant information. These features ensure efficient workforce allocation, reduce scheduling conflicts, and improve employee management.

The Report Generation with Analytics Module enhances decision-making with dashboards for contracts, sales, inventory, and manpower. It tracks contract renewals, sales trends, stock turnover, and staffing efficiency, providing insights that help optimize resource allocation and improve operations.



Fig. 3. Contract Summary Statistics

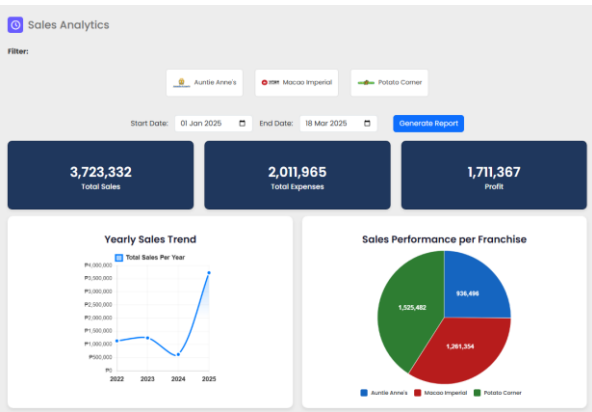


Fig. 4. Sales Analytics Dashboard

To validate the Franchisee Management System (FMS), the researchers conducted a User Acceptance Test (UAT) with key stakeholders from 11 Nevada Management Group after the system's development. A demonstration of all modules and features was presented, where the researchers showcased each functionality to the participants. The Area Manager, Training Manager, Business Development Officer, and HR Manager were involved in the testing process, providing direct feedback on the system's usability and effectiveness.

A 5-point Likert scale was utilized to evaluate various aspects of the system, enabling participants to rate its user interface, functionality, and overall usability. The User Acceptance Testing (UAT) results were compiled based on user feedback, with ratings determining whether each feature met the operational and usability standards of 11 Nevada Management Group.

The following sections present the findings from the UAT, highlighting the system's performance across key modules and user satisfaction with its features and usability.

Table 1. UAT Results

Module	Score
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Franchising Agreement Monitoring	97.14%
Inventory Management	100.00%
Manpower Deployment	91.43%
Sales Performance Management	95.71%
Report Generation with Analytics	93.57%

Overall, the UAT results indicated that all modules were well-received by the users, with an average score of 95.57% across all functionalities. The Inventory Management Module received the highest rating (100%), reflecting its effective real-time stock tracking and automated notification features. The Franchising Agreement Monitoring Module (97.14%) and Sales Performance Management Module (95.71%) were also highly rated, particularly for their contract renewal tracking and accurate sales computation capabilities.

Additionally, a usability test was conducted to assess the design, functionality, and user-friendliness of the system. The results are presented below:

Table 2. Usability Test Results

Module	Score
User Interface Design	96.25%
System Functionality	94.10%
Ease of Navigation	98.00%
Performance Accuracy	95.20%
Overall User Satisfaction	96.00%

Users found the system highly intuitive and easy to navigate, with clear labels, distinguishable icons, and well-spaced layouts. The navigation

experience was rated 98%, indicating that users could efficiently access different modules without confusion or delays.

4. CONCLUSIONS

The implementation of the Franchisee Management System (FMS) represents a significant advancement for 11 Nevada Management Group, streamlining franchise operations and eliminating inefficiencies caused by fragmented, manual processes. By integrating five (5) key modules, the system ensures real-time data accuracy, reduces redundant tasks, and enhances compliance with franchise policies.

Stakeholder feedback and User Acceptance Testing (UAT) confirm the system’s feasibility and effectiveness in meeting operational needs. With real-time insights and improved decision-making capabilities, upper management can make data-driven strategic actions that optimize resource allocation and performance. Future enhancements, such as predictive analytics and third-party system integration, could further refine operations by providing deeper market insights and improving interoperability with external franchise systems.

Overall, the FMS not only addresses current operational challenges but also lays the foundation for ongoing innovation, positioning 11 Nevada Management Group for long-term growth and competitiveness in the evolving franchise industry.

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