CASE STUDY ON IMPLEMENTING ERP IN SANDRIANA LAKE VIEW HOTEL, KANDY, SRI LANKA

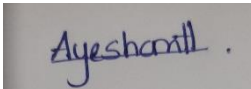| Name	H P A Sadeesha
Index #	
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I declare that the work presented in this coursework is entirely my own. I confirm that:

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2. Any external sources of information and ideas used in this work are cited and referenced accurately. I have provided proper credit to the original authors through citations in the text and a comprehensive list of references.

3. The data and findings presented in this work are genuine and have not been manipulated or fabricated. Any assistance received in the collection and analysis of data is acknowledged appropriately.

4. I have not submitted this work, or any part of it, for any other academic qualification.

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I am aware of the consequences of academic misconduct and understand that any violation of ethical standards may result in disciplinary action.

Signed: Ayeshanil .

H P A S M KUMARI

01.01.2025

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EXECUTIVE SUMMARY

Sandriana Lake View The hotel Kandy is a moderately sized establishment located close to Kandy Lake. Manual procedures and a lack of technology integration are causing the hotel to have operating problems. Customers get unhappy as a result, and billing problems and delays occur.

As a result, the study will recommend an ERP system that combines inventory, restaurant, and reception operations. It will be possible for the suggested system to:

To reduce mistakes, automate the current manual procedures.
Give the appropriate information in almost real-time to facilitate decision-making.
Efficient operations for better client experiences.

The solution guarantees increased cost savings, competitive advantage, and operational efficiency, all of which will help Sandriana Lake View Kandy achieve long-term growth and high levels of guest satisfaction.

INTRODUCTION

Sandriana Lake View Kandy is a pictorial hotel investment done at the very heart of Kandy in Sri Lanka. It stands ideally close to the iconic Kandy Lake and is a medium-level hotel where comfort and scenic beauty create a very promising assurance for placid retreats among guests. This hotel has gained much fame for its elegant accommodation, deluxe rooms, and family suites with all modern amenities, including air conditioning, Wi-Fi, and a stunning view over the lake and surrounding mountains. It houses a restaurant serving a great variety of Sri Lankan and international dishes that will further enhance the experience at the hotel Sandriana Lake View Kandy.

The reception system of the Hotel manages Guest registration effectively to allow the check in and check-out procedure to occur smoothly and well organized. The integration between the reception and the restaurant of the hotel is a huge challenge at this present time. The restaurant raises the food bills manually, that are physically shifted to the reception for consolidation. This process is hence prone to errors where misplaced bills, incomplete and incorrect entries of food items, and sometimes failure to deliver bills at all are common. These inefficiencies have caused considerable financial losses for the hotel Sandriana Lake View Kandy. We would like to propose the implementation of a new software solution designed to integrate the restaurant and reception systems. The software will automate the process of food billing. It links restaurant orders directly to the hotel's centralized system, hence assuring communication in real time between the two departments. The software will largely minimize manual intervention, reducing errors and increasing the efficiency of operations.

METHODOLOGY

The following methodology was followed to understand the operational difficulties and suggest a suitable ERP system for Sandriana Lake View Kandy:

Key Stakeholder Interview: in-depth discussion with the owner regarding the key functions, challenges, and objectives of the hotel.

Particular attention was paid to the existing inefficiencies, especially those relating to billing and the workflow of operational tasks (US EPA, 2014).

Development of business procedures: looked for inefficiencies in the present manual billing and redundancy in the data processed amongst the current systems concerning this business, whether it be the restaurants themselves, inventory, or reception.

Employed methods such as value chain analysis to evaluate probable areas for ERP upgrade. ERP Solution Design: Centralized ERP System Integrating Restaurant Operations, Inventory, and Reception: I have given much emphasis on the automation of workflow and dashboards presenting real-time insights in this regard.

STAKEHOLDER ANALYSIS

Important Parties:
- Managing Director: Ensures strategic integration and execution.
- General Manager: Coordinates the integration of operations.
- Restaurant and reception staff: technology is used on a regular basis
- Guests: Those who gain indirectly from improved service.

Strategies for Stakeholders:
- Training courses to guarantee a seamless onboarding process.
- Frequent feedback loops to resolve issues.
- Campaigns for communication emphasize the advantages (Product Plan, 2018).

VALUE CHAIN ANALYSIS WITH ERP INTEGRATION

After analyzing Sandriana Lake View's value chain following business activities were identified as areas where ERP can add value to, the activities identified were categorized into 2 areas as,

1. **Primary activities**
   - **Inbound logistics**: Raw material arrivals are referred to as inbound logistics.
   - **Operations**: The production process of a good or service is the focus of operations.
   - **Outbound logistics:** monitors the delivery of a final product to clients.
   - **Marketing and sales:** draw in potential clients and persuade them to buy.

Primary activity	Current State	ERP impact
Inbound logistics	When procurement of raw materials, fresh foods and consumables are managed manually it often leads to errors which lead to inefficiencies in tracking the stock/ inventory level.	Overstocking, understocking and stock shortages can be managed by automating inventory management as it ensures real-time tracking.
Operations	Efficiency within the hotel is negatively impacted due to manual check-ins and check-outs by guests to the restaurant, also the delays in communication and errors in billing.	By integrating the hotel reception and restaurant operations, manual tasks can be reduced, and the billing will be accurate.
Outbound logistics	Reconciliation of orders and guest billing are delayed due to disjoint systems.	Through a centralized billing system, the errors and delays can be minimized resulting in enhancing customer satisfaction and experience.

Marketing and sales	Due to limited data sharing across departments marketing efforts are fragmented, which results in less personalized guest engagement and inefficient campaign tracking.	Using a centralized ERP system to manage guest data aids in tailoring marketing campaign according to guest preferences.

2. Support / secondary activities

Support activity	Current state	ERP impact
Infrastructure	Operational silos take place due to lack of digital integration in existing infrastructure.	All operational aspects can be integrated to create a unified platform using ERP.
Human resource management	Employees are resistant to change, and training programs/workshops are not consistent	Staff can use the system effectively with role specific training programs
Technology development	Less use of technology and tools in day-to-day activities	Through the introduction of the ERP system, the operations are modernized and foundation for future technological advancements are provided
Procurement	Procurement processes and vendor selections are normally manual and prone to inefficiencies	Procurement processes can be streamlined with real time tracking and timely delivery and cost control is

		ensured by supplier performance

With the incorporation of ERP, business processes would be easier along with primary and support activities. The hotel would be assured of operational efficiency, full process control, would keep abreast of changing market conditions, and raise customers' satisfaction after implementing ERP. Business entities can scale up their activities to effectively grow by maintaining proper stock levels or inventory management, ensuring follow-through with regulatory changes and optimization as well as customization of marketing outreach programs while delivering enriched customer experience with the implementation of ERP systems (Tardi, 2024).

BUSINESS PROCESS ANALYSIS

1. System fragmentation:

•Problem: The company must separately use various software for different tasks like making reservations, placing orders, with HR, and making an inventory. Lack of integration between the different hotels and the receptions causes delays, inefficiencies, miscommunication of information among other departments, and increasing operational costs.

•Impact: Hindered team collaboration, laborious data reconciliation and slower processes.

2. Data redundancy

• Problem: Duplication of data entries in both systems leads to inconsistency of information, errors, and delays in processing important tasks.

• Impact: Data accuracy reduced, too much time wasted in reconciling discrepancies, and mistakes increased.

3. Lack of real-time insights:

• Problem: Access to current information is hard to obtain, it complicates the process of making the right decision on time; this affects the issues relating to forecasting and planning day-to-day operations

• Impact: Inefficiency in resource allocation, missed opportunities, and poor decisions (Amblard-Ladurantie, 2023).

   o **Proposed ERP system features**

1.Database centralization

• How it works: All Information integrates into one ERP system; this means that whatever information is stored at one location can be retrieved by any other department.

•Benefits:

1. Data silos can be avoided by integrating inventory, restaurant, and reception systems.

2. Consistency is maintained throughout all departments and redundancies are at a minimum.

3. Improvement in strategic and operational decision-making with enhancement in data accuracy.

2. Automating workflows

How it works: Repetitive and routine tasks like workflow approvals, human intervention, and reporting.

•Benefits:

1.Minimization of errors caused by manual processes.

2. It increases operational efficiency by speeding up the tasks.

3. Freeing up the time of employees from mundane tasks, they can focus on value addition and more strategic activities.

3. Real-time reporting

• How it works: Dynamic reporting and dashboards present real-time data on key performance indicators and operations.

•Benefits:

1. Business performance visibility is improving from operational metrics down to financial health.

2. Data-driven decisions are instantly empowered by providing actionable insights.

3. Better and timely data improve forecasting and planning.

Anticipated ERP Implementation Benefits:

•Enhanced efficiency through fewer redundancies and connected systems.

• There is more uniformity and accuracy in the data from different departments.

• Faster, smarter decisions through real-time access to information.

•Enhanced productivity and cost-effectiveness through the automation of manual operations.

•More flexibility to the ever-changing needs of the company with dynamic and adaptive ERP solutions.

By addressing current issues and integrating these functions, the ERP system will serve as a revolutionary solution that will simplify the processes and allow the company to expand in the long run.

ERP FUNCTIONALITIES RELEVANT TO EARL'S REGENCY

The ERP system ensures that it introduces the following key features necessary for enhancing hotel operations:

Automated Billing:

Present Issue: Restaurant bills are manually sent to the reception, where most of these are misplaced or incorrect.

Solution: The system will directly connect orders coming from restaurants to a centralized system, which will add them instantly to the guest profile.

Impact: There was quicker checkout, less probability of billing errors, then higher financial correctness.

System Centralization:

Present Problem: In concurrence of systems between the restaurant, inventory, and reception leads to delays and inefficiency.

Solution: The data gets integrated onto one single platform, from which all departments can access.

Impact: Simplified workflows and increased collaboration among departments.

Live Reporting:

Not being able to get real-time insight into it has now become an obstacle to operational decision-making.

The answer is dynamic dashboards showing KPIs on updated income, visitor preferences, and room occupancy.

Impact: Better planning of resources and faster, more informed decisions.

Reduction of errors:

The Difficulty Present: human error in any manual process that contains some data entry.

Solution: Automation of superfluous processes ensures the consistency of data.

Impact: More detailed accuracy in terms of guest management, inventory, and billing.

Scalability:

Prospects or Opportunities: The ERP system may also include modules on advanced marketing, in-room service, and conference management. Impact: The system scales up to meet the needs of the hotel.
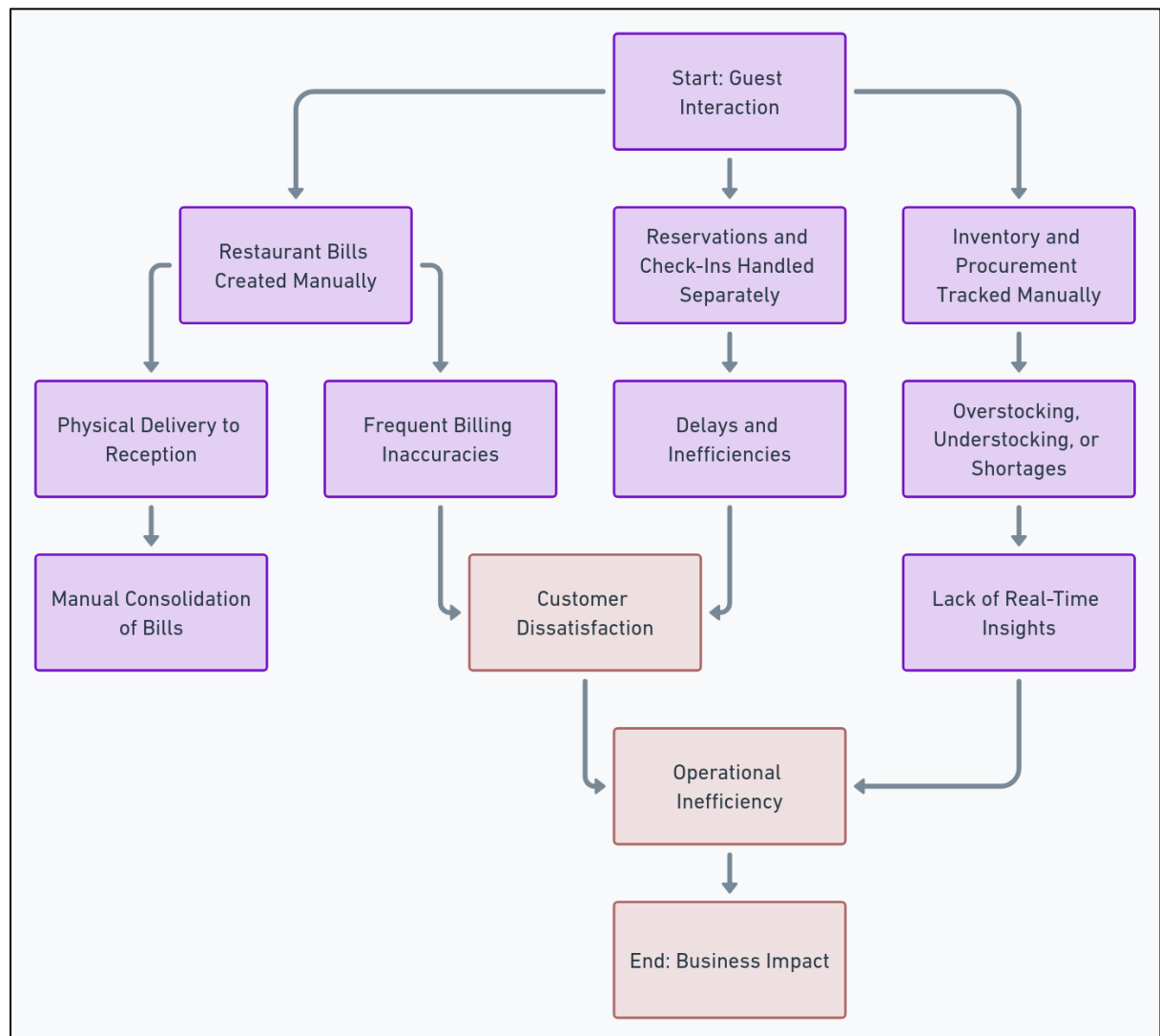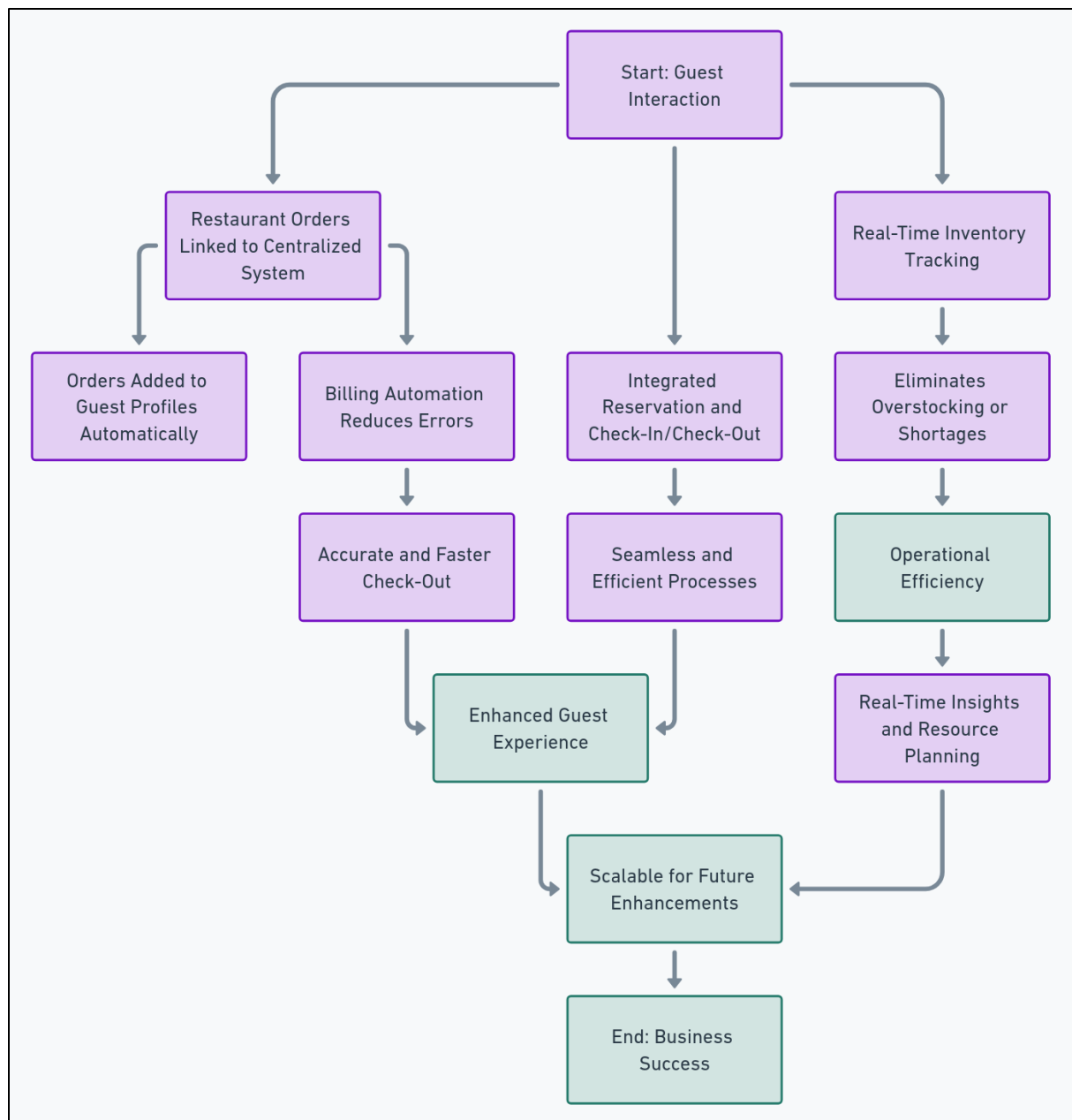

Figure 1:Before ERP system

Figure 2: Proposed ERP system

The overall effect of implementing ERP

Operational Efficiency: Automates procedures and eliminates boring manual work.

Reduces the time required for reconciliation, hence more efficient.

Data Accuracy: Centralized storage of data eradicates duplication and ensures uniformity at the departmental level.

This will increase the accuracy of operational and strategic decision-making.

Cost Savings: Reduces the number of billing errors and hence cuts down on the amount of money lost.

The resources used efficiently cut down the overhead costs. Customer Satisfaction: With faster services, correct billing, and customized visitor experiences, more overall satisfaction will result. Higher participation may exist if some effective marketing was created utilizing the visitor data.

Comparison of Pre- and Post-ERP Implementation

Pre-ERP:

Manual Processes: The staff manually carries out billing, entry of data, among other tasks. This results in delays and inaccuracies.

Disconnected Systems: The reception operates independently of the restaurant and inventory. This leads to miscommunication in all practices and inefficiencies within the system.

Higher Workload: They had to spend more time repeatedly performing low-value-added activities.

Customer Dissatisfaction: The mistakes and delays irritated the guests and brought low loyalty.

Post-ERP:

Automate the billing and tracking inventory to avoid any form of manual process, hence faster and more accurate operations.

Integrated operations: All on one single platform, which allows for smooth interdepartmental communication and avoids delays.

Productive employees: Employees can pay more attention to the strategic tasks of engaging guests.

Guest Experience: the rate of checkout plus the personalized services increases the rate of satisfaction.

BUSINESS PROCESS INTELLIGENCE

Business Process Intelligence or BPI involves the use of automation and analytics for the best operations. It achieves this in the following ways:

o Real-time data analytics: Dashboards monitor the level of inventory, restaurant activity, and room occupancy in real time. Quick action is taken by managers based on an instant summary they get about hotel performance.

o Predictive insights allow forecasting of heavy demand times, based on past trends in data, such as the Christmas seasons. This thus makes it possible to plan resources efficiently, including personnel hiring and the stocking of inventories.

o Automation of such repetitive tasks as bill creation, inventory management, and seeking workflow approvals makes it less human; therefore, speeding up the procedures and guaranteeing accuracy.

o Decision support: Provides the manager with proactive, data-based insights to make better decisions. (Konderla, 2023)

COMPARISON BEFORE AND AFTER ERP IMPLEMENTATION

Prior to Implementation:

- ➢ Ineffective manual procedures that are prone to errors.
- ➢ Financial losses and missing bills are the results of poor communication.
- ➢ Staff workload increases and guest satisfaction declines because of delays.

Following Implementation:

- The billing process is automated and integrated.
- Real-time restaurant and reception operations.
- Financial correctness increased and operational workload decreased.
- Faster services have improved the visitor experience.

6. Features of ERP

1. Automated Billing: Real-time integration of restaurant orders into guest profiles.

2. Centralized System: Departments have easy communication with one another.

3. Error Reduction: Human error is decreased via automation.

4. Scalability: Later additions could include inventory control and room service.

5. Security: Data encryption and role-based access guarantee adherence to data protection guidelines.

BUSINESS PROCESS INTEGRATION AND AUTOMATION

Integration and Automation of Business Processes

Integration of the restaurant, inventory, and receiving systems into one system allows for any modification in data to be updated automatically in real time throughout the hotel.
Keeps the operational silos at bay because of improved coordination.

Automation of routine activities such as invoicing, maintaining the inventory, or updating the data of visitors will not only speed up the process but also reduce the need for human intervention.

Advantages:

Collaboration means smooth exchange of information between departments.

Efficiency: Less duplication, faster complete.

Accuracy: Data consistency in all hotel operations.

Risk analysis

1. Technical risks: these include the incompatibility of already existing systems.

Some of the mitigation strategies involve data backup and pilot testing.

2. Operational Risks: Resistance of the employees to any change. Mitigation: comprehensive training and engagement early on.

Risks to finances: The price is more than expected. (Hayes, 2023)

ORGANIZATIONAL PERFORMANCE BOOST

Improved Speed of Decision Making:

Real-time dashboard of managers displaying occupancy, inventories, and financial data

Help locate bottlenecks quickly so that remedial action may be taken.

Worker Efficiency:

The robotic tasks have been delegated to the employees' mundane work, freeing the employees' time and allowing them to concentrate only on ideas related to value addition. Training modules are in place to help employees get accustomed to the ERP system in the shortest time possible.

Competitive Advantage:

The hotel tries to be on top of its competitors by being operationally more effective and providing more visitor satisfaction. The hotel offers better marketing initiatives and services to attract more visitors.

CONCLUSION AND RECOMMENDATIONS

The implementation of the ERP system also forms a major transition phase in upgrading the operating facilities of the hotel. Since everything is automated and centralized, there will be fewer mistakes and inefficiencies in the work. This will ensure faster decision-making and a transparent operation of the organization with real-time communication between the departments concerned with reception, restaurant, and inventory functions.

Apart from that, the ERP system allows dynamic insights through real-time dashboards; hence, management can monitor the performance and resource allocation for quick responses to the fluctuating market demand. Along with increasing customer loyalty, better-earned customer satisfaction -the result of smooth invoicing, personalized services, and faster checkout time-will also enhance the hotel's prestige in the highly competitive industry. Besides the short-term efficiency advantages, this will bear long-term fruit. At Sandriana Lake View Kandy, it offers a stable technological foundation to secure future digital transformations and make the hotel competitive, thus adaptable in an increasingly changing environment.

Recommendations

Enhance the power of ERP:

Also, include other state-of-the-art marketing modules and AI-driven customized campaigns. Introduction to auto-scheduling and tracking for room service.

Combine IoT devices:

Monitor in real time the occupancy, energy usage, and maintenance needs of rooms using sensors for the Internet of Things.

Improve Customer Experience:

Create a mobile app for yourself now on the integration of ERP in hotel operation, with its facility for the guest's self-service by booking rooms themselves, ordering their meal while they can obtain notifications.

Predictive Analytics Implementation

Keep past data on record to know how to handle resources in high season and in advance. Anticipate the visitors' preferences and offer them customized packages in view of the same.

Cloud solution:

On the whole, issues of security, scalability, and accessibility of geographical locations will handle themselves with the cloud-based ERP solutions.

Integration of Third-party Platforms:

The ERP would interface with online travel agencies, such as Booking.com, TripAdvisor,etc., which provide real-time updates.

Included in the system payment gateway integrations for ease of billing.

Sustainability Projects Track energy usage via the ERP, further expanding green initiatives: waste tracking, sustainable sourcing. Automate answers to frequent questions and guest requests around the clock using AI-powered chat bots. Each enhancement will make a difference in securing the place for the ERP system to grow as dynamically as possible with business requirements, at the pace that continuous growth takes and with the changes taking place in technological advancement, well-matched and in tune with long-term strategy development and operations excellence.

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