Chapter 2

**REVIEW OF RELATED LITERATURE**

This chapter provides information of existing systems or studies related to the proposed study entitled Centralized Management System for Hotel Le Duc. It consists of a brief introduction and related features that fully describe the specific purpose of the current study.

**Foreign Literature**

Hotel Reservation Management System

This study was conducted to discuss about the development of the online management system which is develop of Hotel Reservation Management System. The important of using this system that will help hotel employee to manage online and walk in reservation. Besides that, customer can check the room availability based on the selected date and make reservation online. Hopefully at the end of this system will help to improve the customer experience and hotel employee work efficiency (Hassim, 2022).

Automated Hotel Management Information System

The aim of an automated hotel reservation management system is to handle all aspects of the hotel's information and booking system. This application attempted to cover all operations that occur in residential hotels. It is all identified, from employee management to booking, floors, offices, and room type management, among other things. Customers are offered various facilities such as check-in, checkout, and entry editing, as well as advance payments. Customer has the option to cancel his or her reservation if he or she so desires. Customer Identity or customer name may be used to search for any customer or employee. It is also possible to inquire about available spaces. It will produce reports for customers, employees (who work in the hotel), and a bill for the customer when the customer checks out. This project focuses on creating a client-side and user interface in Java Script, as well as a backend in Hypertext Pre-processor (PHP) to support panorama data processing and management, Structural system analysis and design methodology (SSADM) was used to develop the new system to enable the old system run concurrently with the new system (Betrand et al., 2023).

Design and Implementation of Hotel Room Management System

This study investigates the development of a hotel room management system to address the growing hospitality industry and the increasing demand for travel. As people's desire for travel expands, hotels require efficient management systems to stay competitive. With the continuous improvement of people's living standards, people's spare time life become more colorful than before. More and more people will choose traveling as a form of entertainment, so did the development of hotels for people who were traveling or on business. The competition between hotels is becoming more and more fierce, so improving the management level of hotels, implementing the information construction is undoubtedly a wise choice. Hotel room management system through the collection of information, transmission, sorting, processing, maintenance and use, improve the management level and efficiency, so as to achieve the automation, standardization and humanization of hotel management. The system has the functions of reservation, checkout and settlement. With this system, hotel room can be managed conveniently and quickly, which greatly improves the efficiency of processing and makes management more modern (Xie, Zhang, 2019).

Hotel Nova Systems and Softwares

The main objective of this study is to reduce the manual or offline work in hotels and to establish computerized network which helps hotel staff in management and customers to book rooms, resorts online. Searching hotels, resorts after reaching your place is very time-consuming task and at this time, we get to know the importance of online booking system. The main advantage of this system is that we can book our stay before reaching our destination. this system is not only very cheap but also very quick these days most of the hotels have their own websites and application on which customer can book, view their services and facilities so that they can choose their stay location nicely. The process of booking is very simple fast and also u can pay your rent online or offline in any way you want and advancement of technology make the payment process very secure (Singh, 2021).

The Economic Impact of Innovative Services in the Hotel Industry

This article discusses the importance of innovative services in the hotel tourism industry. Nowadays we cannot imagine the hospitality industry without informative innovation technology. In a competitive market, all touristic organizations are trying to find their places with innovative services. For this reason, it is important all touristic organization must to create new innovative services. In this article it clarifies and analyze the importance and economic development of innovative service in hotel and tourism industry (Davronov, 2021).

**Local Literature**

Hotel Reservation System

In this study, the researchers analyzed various sources and collected opinions to develop a reservation system. The system aimed to simplify hotel bookings by accommodating guest preferences and offering an online reservation process. The user-friendly interface ensured easy control and efficient functionality. This study contributes practical insights to reservation system development. (Talagsad et al., 2020).

Booking and Reservation System

To streamline the reservation process and enhance guest experience, this study explores the design of a Booking Reservation System within a hotel and restaurant management system. A hotel and restaurant management system are software that helps carry out the tasks that should be done in the hospitality industry. Booking Reservation System manages all the guests who want to book or reserve a hotel or a restaurant. Booking Reservation has submodules, such as guest monitoring, general reports, booking reservation, facilities, and. The agile approach was used to build a proposed system. The development team has created a system where the hotel and restaurant management system, booking reservation system, and the guest will benefit. For the booking reservation system, the system is created by the developers to speed things up in terms of booking and reservation and to determine who the people who booked/reserved are. Future researchers can use this project study as a basis for the study. Researchers can also upgrade the system in the future (Fernandez et al., 2020).

Reservation System for Hotel Fox

This study addresses the limitations of manual hotel reservation systems by proposing a computer-based solution for Hotel Fox. A hotel reservation system acts as a platform for users, including both guests and administrators. Guests can utilize the system to reserve their desired rooms, streamlining the booking process.

The study identified challenges faced by Hotel Fox, such as data inaccuracy and potential data loss due to their reliance on manual processes. The primary objective of the proposed system is to reduce time spent searching and retrieving reservation files, while also enhancing security between management and staff.

To achieve these goals, researchers conducted interviews with Hotel Fox representatives to gather information and understand their specific reservation process challenges. Based on the findings, a computer-based reservation system was developed to facilitate faster service for guests. The system functions as follows: Upon logging in, users access a dashboard displaying functionalities through buttons. These buttons offer access to features like registration forms, reservation forms, a customer list, and a list of available rooms. Each button serves a specific purpose within the reservation process. By implementing this system, Hotel Fox can significantly improve their reservation management. They will transition away from manual record-keeping, eliminating the risk of misplaced customer information and room availability data. This will also free up staff time previously dedicated to time-consuming searches for guest details. (Lozano et al., 2020)

Hotel Billing Management System

To streamline financial management and enhance operational efficiency, this study explores the development of a Hotel Billing Management System. Establishing a business may be easy in the eyes of outsiders. However, from an entrepreneur’s perspective, everything is at risk from choosing the line of business to investing necessities. This project aims to give attention to billing’s functions, design, and how to make it work. Billing will serve as an official registrar to customer’s final bills for every availed service from the hotel and restaurant. The objective of the hotel billing system was to provide the computation of the customer billing information about the hotel services offered. It is a financial accounting concept for business organizations, such as the hotel and restaurant industry, to bill customers for the service rendered. The billing report is utilized by the management to know the income generated. The company cannot avoid having problems. Hence, the developers developed a system called “hotel billing system” that will help the manager and administrator to properly process the work of the company. The developers used the agile scrum methodology, which is a project management system that relies on incremental development. Agile scrum methodology helped the scrum team in planning and implementing the system. The developers came up with the findings and conclusions and gave recommendations to the hotel. The researchers also presented a system that can provide the computation of the customers’ billing information and billing report, which can be presented when needed. Core II Hotel Billing Management concluded that Skyline Hotel and Restaurant Management System have a great impact on hotel operation (Pantilla et al., 2020).

Hotel Facilities Management System

This study examines a Hotel Facilities Management System (HFMS) as a sub-component of a broader Hotel and Restaurant Management System (HRMS). The hotel and restaurant management system (HRMS) are a software application that helped carry out the tasks that should be accomplished in the hospitality industry. The HRMS has modules, such as human Resources, Logistics, Finance, and Core. The HRMS is a subsystem where you can manage and monitor every facility of the hotel. This subsystem is a part of Core 3 in the Core module. The five subsystems of the hotel facilities management system are Management, Monitoring, Report, Inventory, and History. Management refers to managing the facilities where you can change the status, add facilities, and edit the information about the facility. Monitoring refers to monitoring the facilities where you can check the condition of facilities. The report refers to creating the report for another submodule that can help maintain the good condition of the facility. Inventory is the itemization of all items in the facility and categories of amenities. History refers to have records of all log-ins in the system (Tirador et al., 2020).

**Synthesis of the Review of Related Literature** The synthesis of the review of related literature depicts the similarities and differences of those related topics and studies that is surely to be relevant and helpful in coming up with the proposed system.

In terms of similarities, all the literature sources underscore the importance of hotel reservation and management, with a common goal of simplifying the booking process and enhancing overall hotel operations. They offer online reservation functionality, enabling customers to conveniently book rooms over the internet. The focus on efficiency improvement is evident, streamlining reservation management, room availability checks, and customer service. Additionally, user-friendly interfaces cater to both customers and hotel staff, facilitating seamless interactions and easy management of reservations and other tasks.

However, notable differences arise among the sources. Foreign literature sources stand out by providing specific details about the technologies and programming languages utilized in their hotel management systems, like Java Script and Hypertext Pre-processor (PHP). In contrast, local literature sources do not disclose such technical information. Moreover, the scope and focus of each system diverge. Some foreign sources concentrate on hotel room management, while others emphasize billing and financial aspects. Conversely, certain local sources offer comprehensive solutions covering various hotel operations, including facilities management, reservations, and guest monitoring.

Several valuable features were adopted for the Centralized Management System for Hotel Le Duc. An online reservation system was implemented to enhance customer accessibility and convenience. Efficient room management functionalities, such as managing room availability, check-ins, and check-outs, were incorporated to optimize hotel operations. A user-friendly interface for both customers and hotel staff were ensured to promote ease of use and efficient task management. Additionally, an automated billing system was established to streamline billing processes, reducing errors and improving efficiency.