

ABSTRACT

The constant growth of tourism industry in Malaysia has led to the rise of the hospitality industry over recent years. The major tourism SMEs are usually providing the needs or demand of tourists such as food, accommodation, transportation and other necessities. This paper focuses on the issues of poor customer satisfaction and operation performance that occur in a small and medium scale hospitality company and the ways to solve the problem by developing a prototype of ChaMS. The five whys analysis was used to identify the problems that occur in the hospitality company. The prototype of ChaMS is developed by using Rapid Application Development (RAD) technique with Microsoft Access. This study showed that the ChaMS had improved their customer satisfaction and operation performance by decreasing the registration process lead time and improving the data accuracy and efficiency. The proposed system also received positive feedbacks with its functionalities from the company.

RESEARCH PROBLEM


 • Faced the difficulties of satisfying their customers and ended up with poor customer satisfactions.

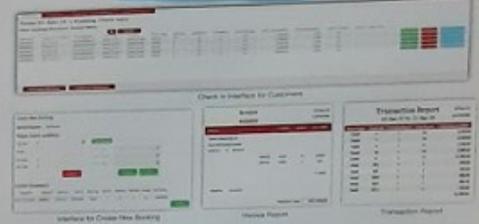
- RESEARCH OBJECTIVES**
- 01 To investigate the factors that affecting poor customer satisfaction in ABC Chalet.
 - 02 To enhance the registration process lead time of ABC Chalet by a prototype of ChaMS.
 - 03 To improve customer's data accuracy and efficiency of ABC Chalet by a prototype of ChaMS.



FACULTY OF INDUSTRIAL MANAGEMENT


 LIM XUE TING


 DR. LEE KHAI LOON



3. Time Study

Time Study (Customer Reserve Earlier)	Current Cycle Time (min)					By using ChaMS				
	1	2	3	4	Avg	1	2	3	4	Avg
Customer Check in (Reserve in earlier)	88	92	128	82	89	80	85	100	82	87
Check in Customer (Present Customer ID card, Book No/ID No)	28	45	30	24	32	28	28	30	25	28
Find the Customer Data (Confirm the details with Customer)	200	180	180	170	183	170	165	165	165	165
Let the details of Customer	65	65	25	65	53	55	55	55	55	55
Calculate the total (payment)	10	25	15	15	16	15	15	15	15	15
Collect the cash from customer	110	90	135	117	113	95	95	100	100	100
Print the receipt in manual receipt book	18	15	35	34	25	25	25	25	25	25
Close System File and Present to customer	65	57	60	57	57	55	57	60	57	57
Total cycle time (min)	779	779	779	779	779	650	650	650	650	650
Total cycle time (min)	13	13	13	13	13	8	8	8	8	8
Save						36%				36%

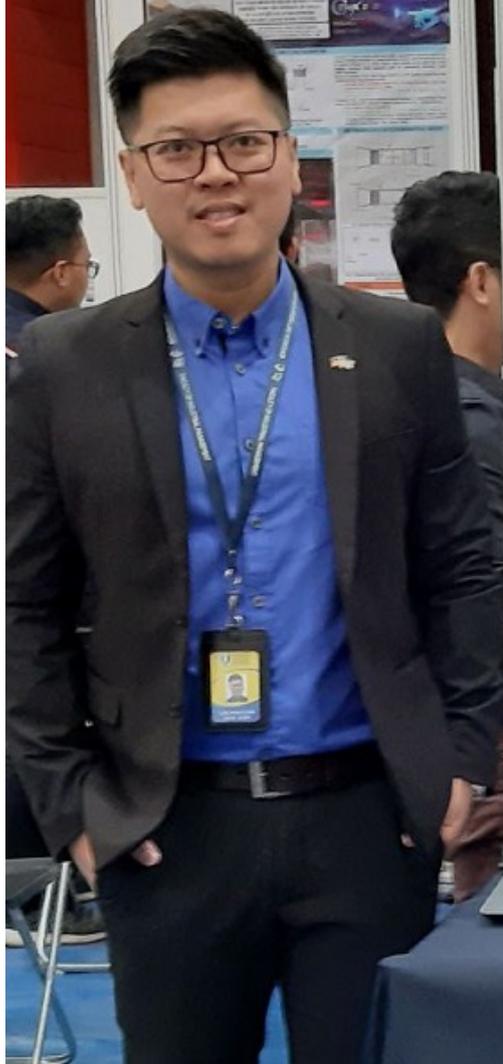
Time Study (Walk in Customer)	Current Cycle Time (min)					By using ChaMS				
	1	2	3	4	Avg	1	2	3	4	Avg
Customer Check in (Walk in Customer)	85	90	100	90	91	85	90	100	90	91
Check in Customer (Check the availability of room)	170	180	150	150	163	165	165	165	165	165
Reserve Customer ID card from Mobile No	28	45	30	24	32	28	28	30	25	28
Present the Customer Data (Calculate the total payment)	110	140	120	120	123	92	92	92	92	92
Collect the cash from customer	10	25	15	15	16	15	15	15	15	15
Collect the cash from customer (Walk in the resort with a manual receipt book)	95	90	120	117	103	95	95	100	100	100
Close System File and Present to Customer	65	57	60	57	57	55	57	60	57	57
Total cycle time (min)	650	650	650	650	650	550	550	550	550	550
Total cycle time (min)	13	13	13	13	13	8	8	8	8	8
Save						15%				15%

CONCLUSION

- ✓ A prototype of ChaMS was successfully developed to automate the process of bookings and customer registrations.
- ✓ Provide better quality of registration service.
- ✓ Tracking of records can be done easily.

MARKETABILITY / COMMERCIALIZATION

- ChaMS is a simple system that able to customized based on the needs of small and medium enterprise.



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20 • 21
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MALAYSIA

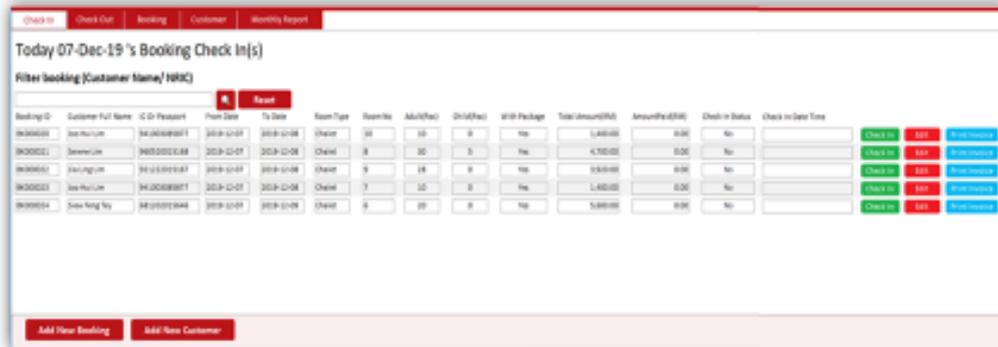
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Chalet Management System

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INVENTION FEATURES



Today 07-Dec-19 's Booking Check in(s)

Filter Booking (Customer Name/IRSC)

Booking ID	Customer Full Name	IC ID/Passport	From Date	To Date	Room Type	Room No.	Multi(Pax)	ChkIn(Pax)	WiFi Package	Total Amount (RM)	Amount Paid (RM)	Check in Status	Check in Date Time	Check In	Cancel	Reschedule
BK00001	Jee Han Lim	94300989611	2019-12-07	2019-12-08	Chalet	10	10	0	Yes	4,400.00	0.00	No		Check In	Cancel	Reschedule
BK00002	Jee Han Lim	94300989611	2019-12-07	2019-12-08	Chalet	8	10	0	Yes	4,700.00	0.00	No		Check In	Cancel	Reschedule
BK00003	Jee Han Lim	94300989611	2019-12-07	2019-12-08	Chalet	9	10	0	Yes	3,900.00	0.00	No		Check In	Cancel	Reschedule
BK00004	Jee Han Lim	94300989611	2019-12-07	2019-12-08	Chalet	7	10	0	Yes	4,400.00	0.00	No		Check In	Cancel	Reschedule
BK00005	See Hong Ng	94300989611	2019-12-07	2019-12-08	Chalet	9	10	0	Yes	5,000.00	0.00	No		Check In	Cancel	Reschedule

Add New Booking Add New Customer

APPROACH

Rapid Applications Development

Figure 1: Check in Interface for Customers



Create New Booking

Mobile/Custom: 30141216

Please search availability:

From Date: To Date:

Room Type:

Room No.:

WiFi Package:

Search

Current Booking(s):

Booking ID	Customer Name	From Date	To Date	Room Type	Room No.	Multi(Pax)	ChkIn(Pax)	WiFi Package	Total Amount
BK00001	Jee Han Lim	2019-12-07	2019-12-08	Chalet	10	10	0	Yes	4,400.00

Figure 2: Interface for Create New Booking



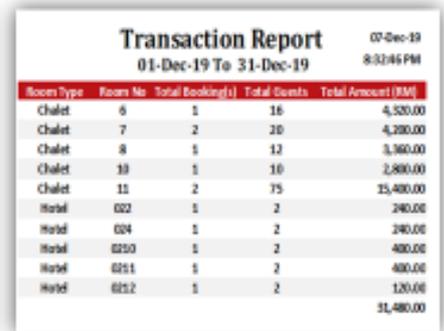
Invoice

07-Dec-19 3:45:56 PM

IRK000020

Room No.	Room Type	Quantity	Amount (RM)
Chalet Rooms No 10	Chalet	10	4,400.00
Room with Package Included			
ADMI Fee		100.00	100.00
CHSE Fee		0	0.00
			x1 Day(s)
Payment Total			RM 4,500.00

Figure 3: Invoice Report



Transaction Report

01-Dec-19 To 31-Dec-19 8:32:46 PM

Room Type	Room No.	Total Booking(s)	Total Guests	Total Amount (RM)
Chalet	6	1	16	4,500.00
Chalet	7	2	20	4,200.00
Chalet	8	1	12	3,900.00
Chalet	10	1	10	2,800.00
Chalet	11	2	75	15,400.00
Hotel	002	1	2	240.00
Hotel	004	1	2	240.00
Hotel	0250	1	2	400.00
Hotel	0251	1	2	400.00
Hotel	0252	1	2	120.00
				31,480.00

Figure 4: Transaction Report

Research

Ts. Dr. Lee Khai Loon creates specially designed chalet management system for hotel industry

11 May 2021

A lecturer from the Faculty of Industrial Management (FPI), Universiti Malaysia Pahang (UMP), Ts. Dr. Lee Khai Loon, 34, has created a research product called ChaMs.

According to the Penangite, ChaMS is a chalet management system based on a special design for small and medium enterprises (SMEs) in the hotel industry.

“This software is easy to use and involves low cost and affordable for SMEs.

“It is also user friendly and only requires minimal computer skills.

“The ChaMS prototype was produced using rapid application development (RAD) techniques through Microsoft Access,” he said.

He added that ChaMS can improve the accuracy and efficiency of data management and even speed up processing time.

“At the same time, it improves operational performance and overall customer satisfaction compared to conventional methods in processing and managing data.

“This research started in September 2019 and was completed within a year for a trial run.

“The idea to produce this study is based on my experience while staying in several small and medium chalets and hotels,” he said.

His research was conducted with a FIM final year student, Lim Xue Ting.

He added ChaMS automates the customer data management process involving booking management, registration, payment, invoice printing, and transaction reports generation.

“The current ChaMS design focuses on internal management.

“Therefore, the next step is to combine website functionalities to enable direct interaction with customers.

“ChaMS offers a promotional price of RM500 one-off purchase and is made based on the needs of consumers,” he said.

This research won gold medals in CITREx 2020 and ITEX 2020.

By: Hafizatulazlin Abdul Aziz and Nur Hartini Mohd Hatta, UMP Press

Translation by: Dr. Rozaimi Abu Samah, Engineering College/Faculty of Chemical and Process Engineering Technology

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