PAPER • OPEN ACCESS

Designing Web-based Food Ordering Information System in Restaurant

To cite this article: L Warlina and S M Noersidik 2018 IOP Conf. Ser.: Mater. Sci. Eng. 407 012029

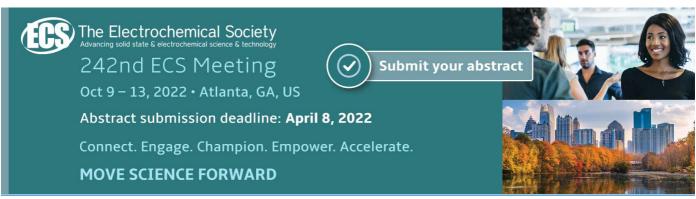
View the article online for updates and enhancements.

You may also like

- GIS-based NNA and Kernel Density Analysis for Identifying Distribution of Restaurant's Popularity Index in Bandung S S A'idah, D Susiloningtyas and I P A Shidiq
- Socio-economic disparities in exposure to urban restaurant emissions are larger than

R U Shah, E S Robinson, P Gu et al.

- Implementing Cloud Computing Technology on Restaurant's Expenses Monitoring System
F N Hasanah, F Renaldi and F R Umbara



IOP Conf. Series: Materials Science and Engineering 407 (2018) 012029 doi:10.1088/1757-899X/407/1/012029

Designing Web-based Food Ordering Information System in Restaurant

L Warlina* and S M Noersidik

Departemen Teknik dan Ilmu Komputer, Universitas Komputer Indonesia, Indonesia

*Lia@unikom.ac.id

Abstract. The purpose of this study is to provide a web-based ordering application that enables customers to place an order food and beverages in restaurant. This research used direct observation to observation in the field of the ordering procedure at the restaurant, the interview method is carried out to the customer, and data collected through research related to the ordering system and manufacturing information systems. Through research methods can be created a system of web-based food ordering information to be applied in the restaurants and know the customers' perception of the web-based ordering system. Web-based ordering application is handy for customers ordering food without having to queue up.

1. Introduction

Meal service system, determining the quality of services and the level of customer satisfaction [1-2]. While Ali and Beg to define the web as a set of documents that are dynamic, and diverse, which in development combines human intelligence, filtering data, search information instruct and granting appropriate user needs answering in a variety of fields [3].

Odhiambo et all explained that the customer is the pillar of the growth of the company so that the necessary existence of a driver to retain customers so that sales growth can be sustained [4]. The results of the research conducted by the Maind et all about Ordering System Room (2017), proving that technology-based booking system via smartphones and tablets can overcome mistakes in ordering food, and can increase the efficiency and the accuracy of the restaurant in time for the service orders [5].

This study is supported by research Maindet all (2018) explaining that the food business is always evolving to follow trends, as well as with the service system provided by food businesses have to adapt to the lifestyle of consumers, one of which by implementing technology-based service system [6]. The results of research conducted by Boo [7], [8] Shariff, Yii [9] and [10] naming explained that in addition to price and quality of the food, another factor in determining satisfaction and customer loyalty in the food business is a service.

Therefore, this study aims to provide a web-based ordering application that can facilitate customers to make food and beverage reservations at the restaurant. With the research methods of observation, interview and data collection through research related to the ordering system and making information systems, the creation of web-based food ordering information systems to be implemented in restaurants, and knowing customer perceptions of web-based ordering systems. This study is because the previous studies focused more on the food business should follow the trend as well as with the service system, but has not explained the reasons why the service system should change, and what kind of service system should be designed, therefore this research is done.

Content from this work may be used under the terms of the Creative Commons Attribution 3.0 licence. Any further distribution of this work must maintain attribution to the author(s) and the title of the work, journal citation and DOI.

INCITEST IOP Publishing

IOP Conf. Series: Materials Science and Engineering 407 (2018) 012029 doi:10.1088/1757-899X/407/1/012029

2. Method

This research used observation method by doing a direct observation of the environment work at one of the restaurants and food ordering system at restaurants and doing interviews with the associated subscriber method system ordering food that exists today. Data collection is done by searching for information on the previous related study food ordering system and manufacturing information systems.

3. Results and Discussion

3.1. The design of the web-based ordering system

To design a web-based ordering system, the first step to do is to create a page for login and registration, reservations at restaurants (See Figure 1).



Figure 1. Login page

Then the homepage page will appear, and please go to the menu list page to see the available food menu, and then enter the food package ordering menu (See Figure 2).

INCITEST IOP Publishing

IOP Conf. Series: Materials Science and Engineering 407 (2018) 012029 doi:10.1088/1757-899X/407/1/012029



Figure 2. Homepage

The last page should be created was food ordering page. The food ordering page, please fill in the food order form as desired, so that your order is listed in the order list that will be delivered (See Figure 3).



Figure 3. The food ordering page.

IOP Conf. Series: Materials Science and Engineering 407 (2018) 012029 doi:10.1088/1757-899X/407/1/012029

3.2. Customer and employee perceptions of web-based ordering systems

The results of research on the opinions of customers and employees on the web-based food ordering system made to one hundred visitors, and one hundred employees are the majority of visitors, and customers feel uncertain whether the existence of web-based food ordering system can facilitate them in ordering food (Note the table 1). The Use Case diagram, the user describes the activities undertaken by the user of the system to generate information about the permissions of each user (user) (See Table 1).

Table 1. Perceptions customers and employees to the effectiveness of web-based food ordering system

Responses	Total	Percentage
Strongly agree	12	12%
Agree	23	23%
Doubt	40	40%
Disagree	25	25%
Strongly disagree	0	0%
Total	100	100%

However, although the majority of customers and employees still have doubts about the effectiveness of web-based food ordering system, enthusiastic customers and employees enormously to web-based food ordering system (Table 2).

Table 2. Enthusiastic customers and employees to the existence of web-based food ordering system.

Responses	Total	Percentage
Strongly agree	20	20%
Agree	60	60%
Do not know	20%	20%
Disagree	0	0%
Strongly disagree	0	0%
Total	100	100%

4. Conclusion

Food ordering system can help customers to place orders and assist employees to manage food orders. Based on the research that has been done, the effectiveness of web-based food ordering system to solve the queue problem of ordering food is still in doubt, but the enthusiasm for customers and employees to the existence of web-based food ordering system is vast. In the hope of a web-based food ordering system can help customers to place orders and assist employees to manage food orders.

References

- [1] Hamid N R A, Saaidin M, Kamari M N, Rose R M, & Ahmad S N B 2017 Service Quality in Halal Restaurants: A Comparison Between Muslim and Non-Muslim Consumers. Advanced Science Letters, *International Journals of Science*. **23**(8) pp. 7750-7753.
- [2] Pai F Y, Yeh T M, & Tang C Y 2018 Classifying restaurant service quality attributes by using Kano model and IPA approach. *Total Quality Management & Business Excellence*, **29**(3-4) pp. 301-328.
- [3] Ali R & Beg M S 2017 Introduction. In Applications of Soft Computing for the Web Springer, Singapore. *International Journals of Science*, **8**(6), pp. 1-7.
- [4] Odhiambo P O, &Nassiuma B K (2017) Supplier Integration Practices and Production Capacity in Restaurant Enterprises, Kisumu City Kenya. *International Journal of Supply Chain Management*, **2**(1) pp. 97-105.
- [5] Maind A P A, Kumar J U, Shraddha B, Megha B, & Darshan B 2017 Food Ordering Smart System. *IJETT*, **1**(1) pp. 1-4.

IOP Conf. Series: Materials Science and Engineering 407 (2018) 012029 doi:10.1088/1757-899X/407/1/012029

- [6] Sarmento E, Loureiro S, & Martins R 2018 Foodservice tendencies and tourists' lifestyle: new trends in tourism. RevistaTurismo&Desenvolvimento, 1(27/28) pp. 2265-2277.
- [7] Boo H V (2017) Service environment of restaurants: findings from the youth customers. Journal of ASIAN behavioural studies, **2**(2) pp. 67-77.
- [8] Shariff S N F B A, Omar M B, Sulong S N B, Majid H A B M A, Ibrahim H B M, Jaafar Z B, & Ideris M S K B 2017 The Influence of Service Quality and Food Quality Towards Customer Fulfillment and Revisit Intention. *Canadian Social Science*, **11**(8) pp. 138-144.
- [9] Yi S, Zhao J, & Joung H W 2018 Influence of price and brand image on restaurant customers' restaurant selection attribute. Journal of Foodservice Business Research, 21(2) pp. 200-217.
- [10] Namin A 2017 Revisiting customers' perception of service quality in fast food restaurants. *Journal of Retailing and Consumer Services*, **34**(5), pp. 70-81.