Information System Services Wenow Clean Franchise

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Abstract. WENOW CLEAN is a franchise business formed by WENOW. WENOW CLEAN is a business that is engaged in shoe washing services. The service process is still done manually, where transactions are still carried out through memorandum, and making reports that are still not computerized. The aim of this research is to provide an application to make order services at WENOW CLEAN easier for the customer and easy to monitor transactions at all outlets easier by WENOW. The method used in this research is a descriptive method while the system development method used the prototype method. The system-approved method used is object-oriented with the Unified Modeling Language (UML) design tool. The expected results of this franchise information system can facilitate service and service improvement at WENOW CLEAN, as well as ease of supervision and inspection of the WENOW CLEAN franchise so that franchise data can be integrated and monitored by WENOW.

1. Introduction

WENOW CLEAN is a franchise that forms and operated by WENOW Department company. WENOW Department is a subsidiary company that is shaded by CV. Bhakti Nusantara. At the beginning of its business, WENOW was engaged in the shoe washing service business, which located on Jalan Ciptagumati No. 17 Cikalongwetan Kab. West Bandung. WENOW has expanded the scope of business and services not only to washing shoes but has expanded into manufacturing cleaning equipment and shoe washing soap products under the brand WENOW CLEAN. In its development, WENOW opened a franchise business strategy named WENOW CLEAN. WENOW CLEAN already has four branches in its business.

In the current system, we found that in WENOW CLEAN there are obstacles in the services that exist in the WENOW CLEAN franchise. One of the obstacles that include service to customers is in the transaction process, where the staff still writing the washing transaction in a note called a transaction washing note. The transaction results recording is writing in a ledger and in the searching process of transaction data must still be seen from the ledger because there is no computerized system. WENOW CLEAN also provides a shuttle service, but this service is not optimal because the driver does not know the exact distance between WENOW outlets and delivery or pickup location, so the driver does not sure about the price given to the customer. Another problem is checking the status of the laundry, which still requires customers to come directly to WENOW CLEAN to find out the laundry status. Even though at the washing note date of completion is stated. But there are many customers want to ensure the status of the laundry. WENOW CLEAN problem in finance between WENOW and franchise is the rise of embezzlement of money resulting from franchise services that result in transactions there is no transparency of transactions from franchise to WENOW. WENOW suffered losses due to a lack of income from the franchise.

According to Justis and Judd (2007) [1], franchising is defined as “a business opportunity by which the owner (producer or distributor) of a service or a trademarked product grants exclusive rights to an
individual for the local distribution and/or sale of the service or product. Besides, in return, it receives a payment or royalty and conformance to quality standards. The individual or business granting the business rights is called the franchisor and the individual or business granted the right to operate in accordance with the chosen method to produce or sell the product or service is called the franchisee. The approach method used to analyze and designed in this research is object oriented analysis and designed. Unified Modelling Language used as modeling tools. The prototype used to build the system. The purpose of this research is to provide a platform for the customer to order WENOW CLEAN services and to make the central supervisor easier to control transactions.

2. Methods
The methods used in this research are object oriented analysis and design as an analysis and design method, prototype as an approach method to build the information system.

2.1 Descriptive
The goal of descriptive research is to describe a phenomenon and its characteristics. This research is more concerned with what rather than how or why something has happened [2]. Therefore, observation and survey tools are often used to gather data [3].

2.2 Object Oriented Analysis and Design
Object-oriented analysis and design (OOAD) is a globally accepted technical process for manipulative an application specific, business or system model, and a simple graphical diagram for analyzing and product quality improvement by applying the object-oriented prototype method [4]. Object Oriented Analysis (OOA) is basically collected works of concurring or cascading system modeling, incorporate various requirements and pre and post analysis methodology for software systems. These methodologies are primarily influenced by different object-oriented programming, data modeling and systematic interconnections [5].

2.3 Prototype
The prototype-based technique defines an object by a single unit of knowledge, which can be the structure, state, or a combination of both [6,7]. An object is referred to as a prototype in this technique. Note that in this paper while referring to the prototype-based we use the terms prototype and objects interchangeably. A prototype is defined by its default knowledge, and the knowledge is acquired by observing the prototype when it is created. The default knowledge can be the structure, state, or a combination of both parameters of the prototype [6, 8, 9]. A new object (or prototype) can be defined by sharing the knowledge of one or more existing objects and by defining additional knowledge in the newly defined object. The prototype-based technique is a class-less technique, which means that all objects of a system are placed at the same level without forming any structural organization (e.g., class-lattice) of the objects [6, 8].

3. Results and Discussion
According to Boulay [10] Information systems (IS) can support and increase the efficiency within the supply chain of the franchise relationship. IS has become important within franchise relationships for controlling franchisees at a distance and developing common norms as a means to discipline franchisees’ ways of working and to influence their business practices. IS has become important within franchise relationships for controlling franchisees at a distance and developing common norms as a means to discipline franchisees’ ways of working and to influence their business practices. Based on Lindh, Dahlin, Hadjikhani [11] with 338 responses 21%, the need for personal meetings has decreased with the use of Information Technology (IT), 66% think IT does not change the need for a personal meeting with using IT and 12,40% with using IT increases the need of a personal meeting.
3.1 Research Objective
The objective of this research is to design an information system to make the customer easier to order WENOW CLEAN services, checking order status, and help the driver to count delivery cost based on distance and help the central supervisor to monitor transactions at franchisee’s store.

3.2 Overview of Running System
Use case diagrams are usually referred to as behavior diagrams used to describe a set of actions (usecases) that some system or systems (subject) should or can perform in collaboration with one or more external users of the system (actors). Each use case should provide some observable and valuable results to the actors or other stakeholders of the system [12]. Figure 1 shows the current system running at WENOW CLEAN. The use case shows the interaction between the actor and the current system.

![Use case diagram](image)

Figure 1. Use case of Current WENOW CLEAN System

The descriptions of use case at Figure 1 are described at Table 1.

| NO | Use Case Name  | Description                                                                 |
|----|----------------|------------------------------------------------------------------------------|
| 1  | Services       | A transaction process services provide by WENOW CLEAN conducted by the owner of the store by serving orders customer choose. |
| 2  | Washing        | The washing process base on customer order.                                  |
| 3  | Order Taking   | A process of taking a customer's order if washing order finished and will be confirmed to the customer to take the order. |
| 4  | Controlling    | An examining process of WENOW CLEAN franchisee reports conducted by a central supervisor. |
| 5  | Finance        | The process of sharing revenue between WENOW and Franchisee.                 |

3.3 Designed WENOW CLEAN Service Information System
Figure 2 shows designed WENOW CLEAN Service Information system, where the new system has registration function, where user of the system need to register before using the new system.
The description of use case at Figure 2 are explained at Table 2.

**Table 2. Use Case Description of Designed WENOW CLEAN Service Information System**

| NO | Use Case Name | Description |
|----|---------------|-------------|
| 1  | Registration  | An account registration process for customers to access the WENOW CLEAN application |
| 2  | Services      | A process carried out by the owner of the outlet (Franchisee) and driver by serving orders desired by the customer |
| 3  | Washing       | A process of updating the washing status carried out by the owner of the outlet |
| 4  | Order Taking  | The process of taking a customer's order if the order has finished |
| 5  | Controlling   | It is a process of examining WENOW CLEAN franchise reports conducted by a central supervisor |
| 6  | Finance       | This is the process of sharing revenue between WENOW and the store owner. |

### 3.4 User Interface Implementation

Order page show by Figure 3 where customer makes a service order on the application according to the needs chosen, by inputting a choice of outlets, selecting the desired service, and determining the pickup route location.
Figure 3. Form Order Interface

Figure 4 shown the detailed order, pick up cost, and distance. The driver can check the customer order and pickup the customer order to store. The distance between store and customer address as well as pick up fee shown at detailed order page.

Figure 4. Customer Detailed Order at Driver Page
The transaction can be checked at Customer Order Data as shown at Figure 5. The customer data interface displays transaction data, order status, price, and date of transaction.

![Customer Order Data Interface](image.png)

**Figure 5.** Customer Order Data Interface

4. **Conclusion**

WENOW CLEAN service information system franchise can make it easier for customers to make orders, find the location of the nearest outlets, find out the status of service, and find out the price of shuttle services according to the location specified. Drivers will be easier to determine prices according to the distance traveled. The advantage for the central supervisor is easier to supervise the reports on the WENOW CLEAN franchise so that it can be monitored through the system. The information system simplifies the calculation of revenue sharing between the franchise and WENOW CLEAN.

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