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Enhanching Customer Loyalty Through Service-Based Customer Relationship Management at Financing Company

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ABSTRACT
Service Oriented Architecture is powerful method to synthesis service from line of interaction that happen in organization. Company X was a company engaged in financing and services that often got any problem in customer acquisition due to the delivery information to customers could not be evenly distributed. This research tried to make a CRM with service oriented approach. The final result of this research is a CRM of Company X which hopefully can be used as market media and can be accessed by the customers on anyplace at anytime. This service based CRM could be enhancing customer loyalty in Company X.
Keywords: *Serviced Oriented Architecture, Customer Relationship Management, customer loyalty*

Introduction

Customer loyalty has an important role in a company, customer loyalty is closely related to customer satisfaction, the more satisfied the customer, the higher the level of loyalty. In order to create customer satisfaction, companies must continue to innovate in creating and processing a system in order to get more customers and to retain loyal customers. researchers in services marketing have been analyzing customer-defined service quality, satisfaction and loyalty, participation in services delivery[1]. Service strategy can be used as a basis in the manufacture of strategy and planning for the implementation of IT services, in accordance with the requirements of the company and its customers[2]. One strategy that can be used to maintain customer loyalty is to use Customer Relationship Management (CRM), CRM is a strategy to manage corporate relations with customers at the business level, this strategy can be used by companies to be able to retain customers and provide added value to customers and with once the company can obtain sustainable profits (Edward C Malthouse).

ITIL version 3 describe service as business of delivering value to customers by facilitating or providing the results to be achieved by customers without any additional specific costs or risks[3]. 70 of 100 people in the United States are willing to pay more for companies that they believe are able to provide better service. The lifecycle management of services becomes more complicated and requires multidisciplines, as compared with the traditional systems and software engineering for component-based and objectoriented analysis and design approaches. Service Oriented Architecture (SOA) has been applied in IT industry as a promising way to fit IT system closely with business requirements, or utilize existing assets flexibly and reuse legacy systems. Despite its popularity in practices and various service oriented frameworks and methodologies proposed up by researchers, currently there is no standard process for SOA analysis and design has been accepted. The key aspects in the service analysis and design are: service interaction, relationship, auditability, privacy, compliance, pricing, billing, support levels, risk, SSO, access control, and contract. Among of those aspects, interaction has an important role. It is a position where a service is provided. through the identification of points where the interaction occurs, service potential can be well identified.

Service Oriented Architecture (SOA) method was choosen because this method is a service oriented architecture, where a problem will be divided into various kinds of small services that work together. SOA is an architectural style, it combines units that the application program of different functional and service through well-defined interfaces[4].

This research aims to design a CRM in a finance company with a SOA approach. the service to be provided is the result of an analysis of the interaction lines in the blueprint service[5]. Customer Relationship Management (CRM) is intended for both prospective and regular customers so that they can easily obtain information on service products from the company[6].

RESEARCH METHOD

This section will describe the method to conduct the research. Broadly speaking, there are five steps taken as shown in the image below.

Figure 1. Research Method

The first step, the authors will approach the stakeholders of the system to find out the direction of CRM development needed. interviews were conducted to find out the flow of business that occurred. then this business flow is mapped into a blueprint service consisting of five layers: physical evidence, customer action, on stage contact person, back stage person, and support process that occurs. T
Through this blueprint service will appear lines of interaction that occurs, involving customers with the system or people in the system. The service to be provided is a manifestation of the recorded interaction lines. Then this interaction becomes the basis for the writer to decide the service candidates to be developed. The final stage is designing services that will be developed in a continuous flow.

DISCUSSION

Service Blueprint

Service blueprint is a picture or map that can describe a service system accurately, so that as individuals who are involved in a service provision system can understand the system well even though each has different functions and roles. The following is the blueprint service for Company X online transaction services.
Physical Evidence are things that can be seen by customers when they come to get services, such as buildings, parking lot and other things that appear, on the blueprint service above the phsycal evidence section that is visible is the website, transaction evidence, proof of payment, vehicle units, Company X building and reports. Customer Action is an activity carried out by the customer to get service and deal directly with front liner officers, in the customer action blueprint service the above section produces account registration, data validation, conducting online transactions, getting proof of transactions, making payments, getting proof of payment, getting vehicles, get notifications for service, do vehicle service and can fill out the comment form on Company X services. Onstage Contact Person is an activity carried out by front line officers in serving and meeting the needs and desires of the costumer. In this section there is contact between the customer and the employee which largely determines customer satisfaction. In the blueprint above the onstage contact person section produces several activities, namely getting a notification to send the vehicle to notify the customer to perform vehicle service and the vehicle service process. Backstage Contact Person, This is an activity carried out by backstage officers, back office employees who support the work of front liner employees in meeting customer needs and in this section there is no contact between the businessman and the employee. In the bluprint above the backstage section generates a number of activities namely managing buyer data, getting transaction notifications and getting payment notifications, receiving notification comments from buyers for Company X services, and receiving reports. Support System Is a supporting process in an effort to meet the needs and desires of customers. In the service blueprint shown in Figure 2, the registration system, transaction system and payment system are all combined in the Company X service system.

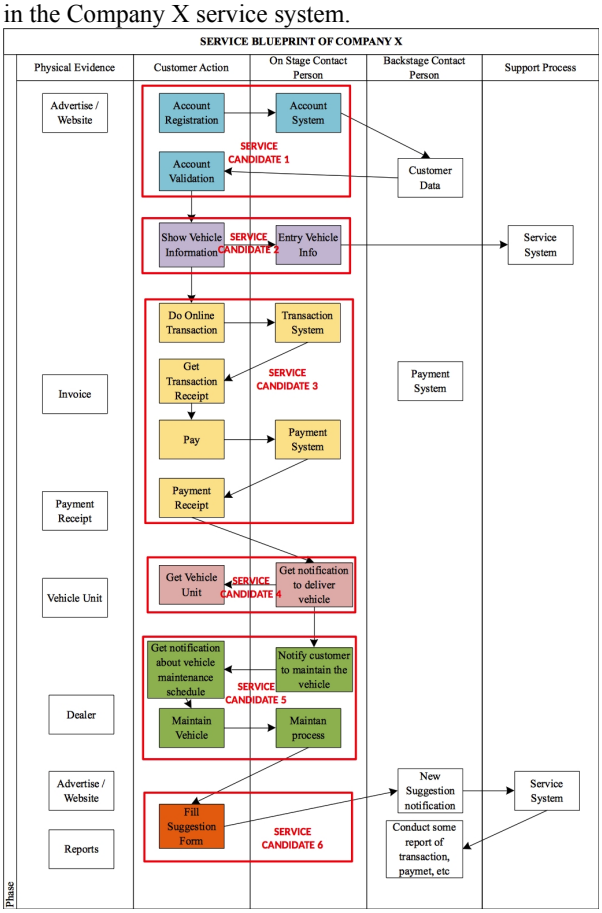

Figure 2. Service Blueprint of Service Based CRM

Figure 3 shows the service blueprint in Company X. The five layers provide an overview of who was involved, and what actions took place in the service delivery process. The interaction line that is between the customer action and the front stage contact person (note the red line). From the line interactions, the process of providing services is grouped according to the purpose of the activity and divided into five services (note the difference in the color of the box). There are five service candidates that will be explained in the next session.

Service Candidate

This service candidate is a detailed process of the blueprint service that has been presented previously. different colors adjust the service colors in the blueprint service in the previous session.

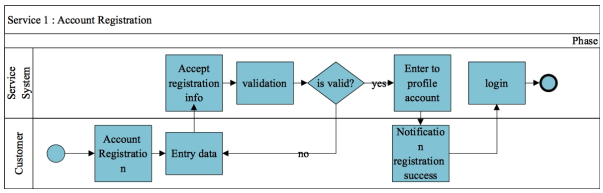

Figure 3. Service 1: Account Registration Flow Chart

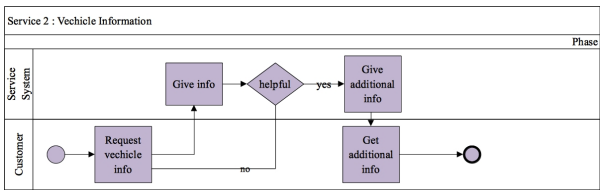

Figure 4. Service 2: Vehicle Information Flow Chart

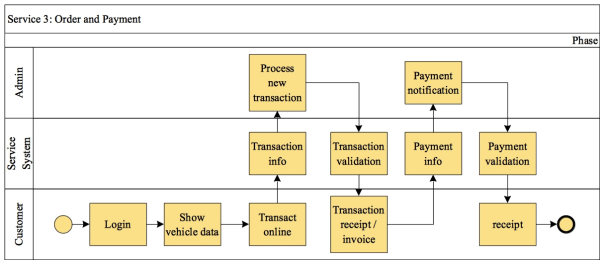

Figure 5. Service 3: Order and Payment Flow Chart

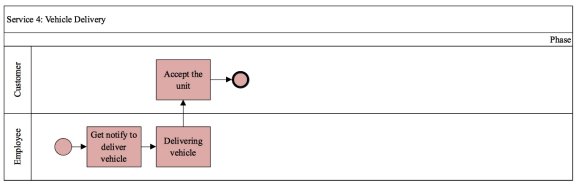

Figure 6. Service 4: Order and Payment Flow Chart

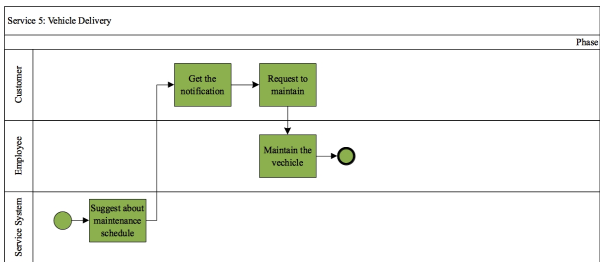

Figure 7. Service 5: Vehicle Delivery Flow Chart

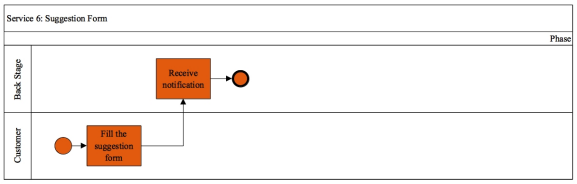

Figure 8. Service 6: Suggestion Form Flow Chart

SUMMARY

This research tries to build a service-based CRM in a finance company. The functions built in CRM are the result of synthesis of service candidates with the Service Oriented Architecture method which consists of several steps, namely modeling of the blueprint service and formulation of service candidates. There are three service candidates which are then broken down into four atomic services. These four atomic services form the basis of designing the next business process to be built in CRM. The results obtained that 87% of valid respondents stated that the CRM successfully helped them to transact, and provide better services.

REFERENCES

[1] I. R. Bardhan, H. Demirkan, P. K. Kannan, and J. Robert, “Journal of Management Information An Interdisciplinary Perspective on IT Services Management and Service Science,” no. January, pp. 37–41, 2015.

[2] I. K. Raharjana, S. Susmiandri, and A. Justitia, “Applying IT Services Business Relationship Management on Security Outsource Company,” *2018 5th Int. Conf. Electr. Eng. Comput. Sci. Informatics*, pp. 426–431, 2018.

[3] S. Taylor, *Service Intelligence*. Boston: Pearson Education, 2012.

[4] H. Tianfeng, “Research on the Service Modeling Method of Information Management Software based on the Petri Net Model General Terms :,” vol. 11, no. 6, 2013.

[5] T. Erl, *SOA Principles of Service Design*, Annotated. Prentice Hall, 2007.

[6] X. Fu, Y. Yu, M. Song, and J. Qi, “Telecommunications Industry,” 2010.