**LITERATURE SURVEY**

# Automating Customer Claim Registration by Text Mining

In call centres, the customer claim, known as contact reason, is registered during the call by including the details and related information of the claim, accompanied by the category of the claim chosen from a list of predefined contact reasons. The summary of the provided information along with the contact reason constitutes “claim”, also known as a Ticket. Depending on a company’s products and services, the contact reason tree can have up to two hundred different categories. The correct selection of the category is crucial to the quality of interaction with the customer as the claim would be forwarded to the corresponding department and responsible teams based on the categories. Therefore, inaccurate contact reasons would result in delaying the processing procedure and ultimately reduced customer satisfaction. In addition, properly understanding all categories of contact reasons is not an easy feat for call center employees.

# A Development of Web-based Customer Relationship Management (CRM) system for Beauty Clinic

With the rapid development of beauty clinics that are everywhere, it can be concluded that beauty and women are two things that are interrelated. Almeera Skin Care is a beauty clinic that focuses on serving beauty treatments with beauty treatments and medicines formulated by doctors. The difficulty of administrators in managing patient data, drug data, and treatment data, this has an impact on services to the clinic. the problem is that all regular customers are not regulated systemically. Another problem that arises is that all beauty products have not been recorded in a computerized database, this is what causes difficulties in searching product data. The combination of realistic virtual environments and product information offers a compelling new medium for consumers to shop for products. **SRC: A service registry on cloud providing behavior-aware and QoS-aware service discovery**

Aiming to discover the most suitable service center to the discovery request of service consumer which includes functional requirements and non-functional requirements, this paper proposes a service registry model named as SRC (Service Registry on Cloud) which is an extension of the keywords-based service registry model and deployed as a cloud application to provide behavior-aware and QoS-aware service discovery services. SRC stores the semantic descriptors of Web Services and the feedback of dynamic status of QoS of Web Services as GFS files in a cloud and uses the MapReduce mechanism to process these files. The running results of an instance of SRC deployed in an experimental environment have shown that SRC is effective and feasible.

# Second Life Gift Registry: Bringing Retail Web Applications into the Metaverse

The combination of realistic virtual environments and product information offers a compelling new medium for consumers to shop for products. Specifically, by combining the experience of exploring a virtual house with retail information on items in that house, a consumer can virtually populate a house with desired items. This is particularly appealing for people, such as a couple getting married, who are looking to furnish an entire house with newly-purchased items. The system proposed in this paper provides this combination of realistic, 3D visualization and detailed product information. It uses Second Life to provide the realistic user interface, and a REST-style web-based application to create connections between this platform and publicly-available retailer APIs. In cases where a retailer API is unavailable, HTML wrapping may be used to obtain equivalent information. The economic viability of the concept is examined through a business case study.

**Building the Semantic Relations-Based Web Services Registry through Services Mining**

Bridging the gap between service consumer and service provider, Web services registry (WSR) plays an important role in the Web services architecture. But the main obstacle in front of service register is short of adequate knowledge. In this paper, we present an approach that combines social networking and semantic Web technology with WSR to facilitate the dynamic Web services composition (WSC) based on AI reasoning and planning approach. Firstly, we clarify the novel WSR, named services network (SN), and present its concepts and components. Secondly, we outline how to build SN through services mining and some of the issues that should be considered. Thirdly, we evaluate how this network style registry could facilitate automated WSC. Lastly, a short comprehensive overview of existing related works is also included.

# Online Helpdesk Support System for Handling Complaints and Service

For a service company, helpdesk or customer service is very important part of their company. Good customer support and services will help company to sustain and maintain the customer. Nowadays, customers are getting used to use application during the development of technology, internet, and application. It is very important for service company to also take part in developing a good helpdesk system. The good service will improve the service quality which are impacted to the loyalty of customers. This paper described the main problem faced by one of the private delivery services company located in Jakarta, Indonesia. The methodology used in this paper are data collection through study literature review and interview session to obtain requirements. This paper also discussed about designed and developed online helpdesk system to support customer service system related to the customer satisfaction, complaint, and solve problems by them self.

**Smart Complaint Management System**

# Customers are the essential factor in the organization. The business has to support the customers' preferences and demands for creating the customer loyalty, which make the customer still purchases with the particular company. The customer may feel dissatisfied with the service when he or she receives the delay of services and they do not know the channel for filing the complaint, and also the current complaint handling in the organizations still has the problems. Therefore, we, developers of this project implemented the Smart Complaint Management System (SCMS) consisting of the mobile application, chatbot and web application, for solving the customer's dissatisfaction issue. Furthermore, the SCMS has the service for classifying the complaint, then automatically direct to the responsible department, and the service for finding the similar complaint to avoid submitting the duplicate complaint.

# Customer service management: towards a management information base for an IP connectivity service

# Customer service management (CSM) offers a management interface between customer and service provider which enables customers to individually monitor and control their subscribed service. This paper presents an approach towards the definition, implementation and instantiation of a CSM management information base for an IP connectivity service (CSM-IP-MIB). The approach uses object-oriented techniques to model the CSM-IP-MIB in order to facilitate reusability and specialization in real-life scenarios. The CSM-IP-MIB consists of four packages that reflect the relevant details of the IP connectivity service, including contracts, SLA, topology, current and historical state of the IP connectivity, QoS parameters, QoS violations and problem management as well as authentication and access control to provide customer-specific views.

# CARUSO: Customer Care and Relationship Support Office

# Customer Relationship Management (CRM) is an inherent business strategy for companies big and small. Technology has reached a point where it is truly enabling the way enterprises to manage their customer relationships. The goal of the EU funded project CARUSO is the design of a software toolkit that facilitates the building and maintaining of high quality business-to-business and business-to-customer relationships. CARUSO is designed to allow a multi-dimensional way of looking at markets, customers, suppliers, products, personnel, internal and external information, communication and action flow. This will be accomplished by the following core features: front-office application builder with customer care and marketing desk, basic technologies comprising a general communication server, intelligent information, document and contact access, unified messaging, and a customizable user interface.

# Travel Shop Service System with Identity Key

# In modern life, it is a good choice to stay overnight in the hotels or Inns for a business or a short trip in a busy schedule. Today, most of the current hotel check-in and -out registration procedures still need to be completed by the counter service staff by contacting the hotel guest. However, the current registration procedure is not private for customers who put great importance on privacy and security. To protect customer privacy and personal information, contacting people should be reduced, and the transmission of customer personal data must be encrypted and avoided. For the business and security service of a high-level hotel to attract more customs, the best choice is to provide an electronic counter which provides customers with automatic check-in and out registration procedures. However, personal IDs resulting are required to successfully perform personal identification or authentication.