Paper1

Title: An Development of Web-based Customer Relationship Management (CRM) system for Beauty Clinic

Authors: *Sarwindah; Marini; Hengki; Sherlly Febriyanti (2020, IEEE)*

Methodology: The goal of this study is to create an information system that will assist Almeera Skin Care in providing customers with satisfactory service by analyzing the current issues. This system will be able to assess the impact of service quality, product, type of care, and registration on customer satisfaction as well as its impact on consumer loyalty. The outcomes of the creation of the Almeera Skin Care beauty clinic service system can make it simpler for administrators to record customer information, products, types of care, registration, examinations, patient medical records, and eliminate errors in recapitulating revenue report data.

Advantages: It provides an ease platform for the customers to assess the impact of service quality, product, type of care and registration on customer satisfaction as well as its impact on consumer loyalty.

Paper 2

Title: Automating Customer Claim Registration by Text Mining

Authors: *Peyman Beyranvand; Tevfik Aytekin (2020, IEEE)*

Methodology: The use of text mining and machine learning in call centers to speed up the process of recording consumer claims and raise customer satisfaction is discussed in this paper. Comparing the proposed solution to skilled call center agents, the claim registration process is quicker and more accurate. Customer satisfaction will rise as a result of the use of text mining and machine learning techniques, which also give call center employees greater ways to assist customers.

Advantages: It speeds up the process of recording consumer claims and raises customer satisfaction.

Paper 3

Title: Smart E-Grievance System For Effective Communication In smart Cities

Authors: *Sanam Kazi; Sadiya Ansari; Mahvash Momin; Abbas Damarwala (2018, IEEE)*

Methodology: This paper has suggested a creative application to post complaints in text, image, or video format. The user's location will be monitored. According to the domain, or type

and number of problems, the locally elected authority will view a list of issues in his or her community. The application will also include a "Serve India" module where citizens who want to volunteer their time for the country can sign up to do so. The responsible authority will then assign them to work on spreading awareness of smart digital India in rural and other underdeveloped regions of the nation.

Advantages: Issues of the rural people will be effectively communicated and resolved by the locally elected authority.

Paper 4

Title: Online Helpdesk Support System for Handling Complaints and Service

Authors: *Cadelina Cassandra; Sugiarto Hartono; Marisa Karsen (2019 IEEE)*

Methodology: This paper has mainly described the problems faced by one of the private delivery service companies located in Jakarta, Indonesia. The data collection for the requirement analysis of this paper was done through literature review and interview sessions. It has also discussed the design and development of the online help desk systems and their step by step process through different layers to support the customer service system. The customer service system provides customer satisfaction, resolves the issues and complaints of the customer. The online help desk system was developed so that the problems faced by the customers can be solved by themselves and the customer can get satisfied with the customer service.

Advantages: The company saves a lot of time in serving customers, saves an amount of money in eliminating telephone charges due to customer complaints and questions, and self service for customer satisfaction.

Paper 5

Title: Real World Smart Chatbot for Customer Care Using a Software as a Service (SaaS) architecture

Authors: *Godson Michael D'silva, Sanket Thakare, Sharddha More and Jeril Kuriakose (2017, IEEE)*

Methodology: In this paper, the social media (ejabberd) messages are taken into consideration based on which the grievances are categorized as actionable and non-actionable. Based on the categorization, required actions are taken. If the grievance is an actionable one, then an automated chat bot initiates a conversation with the user with the intention of resolving the grievance. This is implemented using LUIS and cognitive services.This system is implemented on AWS Public Cloud in order to provide a highly robust, scalable and extensible architecture.

The major technologies taken up by the author in this paper are Ejabberd server, AWS Lambda, API Gateway and Chatbot.

Advantages: This methodology saves a lot of money and resources of the organization which is used in customer service thereby making the customer more happy and satisfied. Also, its implementation in AWS Public Cloud gives it a capability to handle an enormous amount of user base.

Disadvantages: Though this methodology looks advantageous, it has its own disadvantages which include the inflexible semantic coupling and message delivery issues of ejabberd servers etc.

Paper 6

Title: An Intelligent Cloud-Based Customer Relationship Management System To Determine Flexible Pricing for Customer Retention

Authors: *Stephen W.Y. Cheng, K.L. Choy, H.Y. Lam (2016, IEEE)*

Methodology: In this paper, an intelligent cloud-based customer relationship management system (ICRMS) is designed to formulate the sales and marketing strategies on flexible pricing in the supply chain.The system combines cloud technology and a fuzzy logic approach to manage sales and order data on the Internet and to determine the discount price of products respectively.

Advantages: In this system, it is identified that the successful ordering rate is increased and the service satisfaction of existing customers is also enhanced. Thus by integrating cloud technology and a fuzzy logic approach, the model can provide a clear road map to explore potential business opportunities in the trading industry, enabling trading companies to retain customers by building long term relationships.

S.No	Author	Year	Title of the paper	Contribution
1	Sarwindah; Marini; Hengki; Sherlly Febriyanti	2020	An Development of Web-based Customer Relationship Management (CRM) system for Beauty Clinic	The outcomes of the creation of the Almeera Skin Care beauty clinic service system can make it simpler for administrators to record customer information, products, types of care,

				registration, examinations, patient medical records, and eliminate errors in recapitulating revenue report data.
2	Peyman Beyranvand; Tevfik Aytekin	2020	Automating Customer Claim Registration by Text Mining	The use of text mining and machine learning in call centers is used to speed up the process of recording consumer claims and raise customer satisfaction.
3	Sanam Kazi; Sadiya Ansari; Mahvash Momin; Abbas Damarwala	2018	Smart E-Grievance System For Effective Communication In smart Cities	According to the domain, or type and number of problems, the locally elected authority will view a list of issues in his or her community. The application will also include a "Serve India" module where citizens who want to volunteer their time for the country can sign up to do so.
4	Cadelina Cassandra; Sugiarto Hartono; Marisa Karsen	2019	Online Helpdesk Support System for Handling Complaints and Service	The design and development of the online help desk systems and their step by step process through different layers is given to support the customer service system. The customer service system provides customer satisfaction, resolves the issues and complaints of the customer.
5	Godson Michael D'silva, Sanket Thakare, Sharddha More and Jeril Kuriakose	2017	Real World Smart Chatbot for Customer Care Using a Software as a Service (SaaS) architecture	Ejabberd messages are categorized as actionable and non-actionable. For actionable ones, automated chatbot initiates a conversation with the user using LUIS and cognitive services
6	Stephen W.Y. Cheng, K.L. Choy, H.Y. Lam	2016	An Intelligent Cloud-Based	Cloud technology and fuzzy logic approach is utilized to manage

			Customer Relationship Management System To Determine Flexible Pricing for Customer Retention	sales and order data on the Internet and to determine the discount price of products respectively