Ideation Phase
Literature Survey

Date	30 August 2022
Team ID	PNT2022TMID17883
Project Name	Project – Customer Care Registry
Maximum Marks	4 Marks

Literature Survey on Customer Care Registry						
Serial Number	Journal Name	Author Name	Year	Technology Used	Existing System	Proposed System
1	A Proposed Cloud Based Solution for Customer Satisfaction in Telecommunication Industry	Nurulhuda Mustafa, Lew Sook Ling, Siti Fatimah Abdul Razak	2019	Cloud based framework, Data Analytics	In existing cloud based solution framework, user found it difficult to communicate with customer service representative during faulty experience, and follows traditional way of acquiring and managing data or information.	A proposed cloud-based customer supports solution for telecommunication industry. The proposed enhancements are as follows: Mutual agreement between customer and company during making restoration appointment, Real time and status tracking enabled, Enhance customer trust by getting a signature using apps to confirm job done, Job done summary, Introduce loyalty program such as variety of vouchers are given for redemption using accumulated points by customers.
2	Using SMS and Web Technology in Mobile Government Information Services Platform	Hua Zhang ,Fayu Wang	2010	Ajax web technology,multi threat technology	In existing system traditional elecronic system, it usually employs the wired network communication or handles on the spot. In case, the government servants leave the office, they can not obtain the timely information of the government and related departments which causes the delay of decision-making and lack of information. Moreover, the low penetration of the computer terminal restricts people's receive of the government information. With development of the mobile communication technology, especially the roaring increasing of mobile phone users, a kind of mobile wireless administration based on the mobile network platform has emerged. It is taken seriously by many municipalities and regarded as the promoter to build an efficient and transparent government.	A proposed SMS Technology in mobile service platform is a new kind electronic office platform which collates the traditional electronic administration and mobile communication. It collects the public proposals and advices, tracks handling of complaints and checks all kinds of information by means of mobile phone messages and websites. With the constant progress of mobile communication technology and coming of 3G, it will accelerate the development of our country's mobile informatization further. More and more companies will establish their own message platform, thus the exploitation and application of message platform makes great sense in society and reality. The research based on the short message mobile administration platform brings about an efficient, friendly, people-oriented government administration mode, which bridges the government and the public and meets the inner requirement of building a harmonious socialist society.

3	Real World Smart Chatbot for Customer Care using a Software as a Service (SaaS) Architecture	Godson Michael D'silva, Sanket Thakare,Sharddha More and Jeril Kuriakose	2017	Ejabberd,AWS Lambda,Machine Learning, LUIS,Chatbot,API Gateway, Cognitive Services.	As many customers may be using this streams to reach out to company because they need help. The company have setup social marketing team to monitor this stream. But due to huge volumes of users it's very difficult to analyses each and every social message and take a relevant action to solve users grievances, which lead to many unsatisfied customers or may even lose a customer. This papers proposes a system architecture which will try to overcome the above shortcoming by analyzing messages of each ejabberd users to check whether it's actionable or not. If it's actionable then an automated Chatbot will initiates conversation with that user and help the user to resolve the issue by providing a human way interactions using LUIS and cognitive services.	A proposed Real World Smart Chatbot system architecture focus on analyzing this social chats by identifying whether the messages from the customers are actionable or not. All the actionable messages are send to the Chatbot which tries to resolve the issues faced by the user by initiating the conversation with the customer in a more human way. This save lots of money and resources of the company used for customer service and even making the customer more and satisfied. As this proposed system is implemented on AWS public cloud, it make this system capable of handling enormous amount of user base.

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4	Virtual Customer Service Agents: Using Social Presence and Personalization to Shape Online Service Encounter	Tibert Verhagen, Jaap van Nes, Frans Feldberg, Willemijn van Dolen, Ph.D	2014	Data Analysis	In Existing system, we empirically investigate the role of VCSAs to shape more social and personalized online service encounters. Empirical studies on VCSAs are scarce and openly demanded, and a focus on the ability of VCSAs to provide service encounters with a human touch deals with conventional wisdom that social and personal approaches are critical to customer service delivery. Within this inquiry we address the direct influence of VCSA characteristics on online customer service evaluations and are among the first to extrapolate whether employing cues deemed important in traditional service encounter literature. This enables us to evaluate the cross-channel applicability of traditional customer service thought and provide further directions to the academic field of online customer service. It also reduces their effort, time, and cost to design, implement, and maintain such an agent as well as to shape the service process	In proposed system, First, to provide theoretical foundations for the employment of VCSAs, we encourage researchers to experiment with more technically advanced agents that will appear in the near future. By adding and combining elements such as motion, natural speech, lip synchronization, and 3D representation to virtual agent design, new insights into the value of mimicking humanlike service personnel online is gained. Second, more in-depth research on the role of emotions in VCSA settings is encouraged. While we did not find any effect of smiling, VCSAs may still express (positive) emotions that contribute to more positive customer evaluations of the service encounter. An interesting area of future research would be to examine whether affective real-time interactive facial expressions, and more emotional communication styles would influence the socialness and personalization perception of the agent.
5	Online Complaint Registration System to Municipality	A.Prassana, Dr. A.V. Senthil Kumar	2020	Android Studio, Java	In existing system, CMS (Complaint Management System) is used. Manual systems put pressure on people to be correct in all details of their work at all times, the problem being that people aren't perfect, however much each of us wishes we were. With manual systems the level of service is dependent on individuals and this puts a requirement on management to run training continuously for staff to keep them motivated and to ensure they are following the correct procedures. It can be all to easy to accidentally switch details and end up with inconsistency in data entry or in hand written orders. This has the effect of not only causing problems with customer service but also making information unable be used for reporting or finding trends with data discovery.	In proposed syystem, by using android application people can register their complaints in easy and proper format. Mainly they can mark their location in Google Map while placing the complaint so that it will help the people in easy manner. They will also well aware about their complaints progress. They can also provide feedback about their complaints progress weather they are satisfied or not. Also they user can post their requirements through this system and they will receive needed items by admin within couple of hours ,its depending on the needed item and you can also look your status about your requirements. These user complaints, needs requirements maintain by admin. The User post feedback of these CMS system and admin can view this feedback.
6	Implementation Of 'ASR4CRM': An Automated Speech Enabled Customer Care Service System	Aderemi A. Atayero, Charles K. Ayo, Ikhu-Omoregbe Nicholas and Azeta Ambrose	2009	VoiceXML, PHP and Apache, MySQL	The main disadvantage of existing system is the human presence in the Call centers of GSM service providers is poor response time.	The proposed system describes the implementation of ASR4CRM - an automated customer care service system that obviates the need for a human operator, reduces the budget allocation of corporate bodies for CCS and most importantly, improves the business to customer (B2C) relationship, which is often damaged by inevitable flaws in the human character.

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7	A Blockchain and AutoML Approach for Open and Automated Customer Service	Zhi Li, Hanyang Guo, Wai Ming Wang, Yijiang Guan, Ali Vatankhah Barenji, George Q. Huang, Kevin S. McFall, and Xin Chen	2019	Blockchain, AutoML, IoT	In existing system,As for small and medium enterprises (SMEs), it is difficult for them to have sufficient data, in particular, in the early days of establishment. Due to the lack of data, some SMEs purchase data from third parties or crowdsourcing. They may not know the authenticity and the source of the data. A legal agreement is difficult and loose among multiple parties in crowdsourcing. It may consist of many conflicts of interest issues, including intellectual property rights. Moreover, the quality of data is difficult to assure and control. The quality of customer services is also difficult to control and ensure.	The proposed system describes the implementation of blockchain and AutoML which incorporates the open and distributed advantages of blockchain and the automation advantage of AutoML. A new concept on open and automated customer service was proposed. Compared with traditional customer service methods, the proposed platform constructs a shared and trustless environment for data trading, which is particularly helpful for SMEs to acquire sufficient data for achieving automatic customer services as well as developing their core customer service competence.
8	Using Authentic Leadership and Mindfulness as Internal Marketing Mechanism for Enhancing Proactive Customer Service Performanc	C. M. Wu ,T. J. Chen , Y. D. Lee , T. F. Chen	2016	Data analysis, confirmatory factor analysis, structural equation modeling	In existing system, internal marketing is critical for enhancing superior service quality in service marketing domain. Internal marketing is also critical for providing superior service and promoting external marketing success. Even the hospitality supervisors' leadership behavior is critical in influencing employee behavior and work performance. With the more and more complex and competitive hotel external business environment, the issue of how to satisfy consumer needed and not necessarily demand have become critical for hotel to establish competitive advantage.	The proposed model integrates authentic leadership, mindfulness, and proactive customer service performance. According to the analysis, as expected, authentic leadership can positively influence mindfulness, authentic leadership and mindfulness can be used in internal marketing for promoting employees proactive customer service performance. Specifically, we highlight that mindfulness also has a partially mediating role between authentic leadership and proactive customer service performance.
9	An Application of SMS Technology for Customer Service Centre	Ariff Idris, Abd. Samad Hasan Basari, Nur Hanisah Zubir,	2009	Smart Message System Technology, PHP, MySQL	In existing system, LAP is a semi-government organization in Perak which is responsible in managing the water supply service and distribution for Perak citizens. However LAP has only had a hotline number for their customers to make a complaint. The existing method of handling customers' complaint is delaying the action taken.	The proposed system Ces-LAP allow LAP customer to make complaints easier. The proposed system is very much help when there are many complaints at one time. This system can be used by everyone that have accessed to internet and hand phone. Furthermore the system helps LAP to manage all the complaints faster and effective via SMS and web. The prototype of the system is under testing phase. An initial feedback from users shows that the system is quite good in term of its mobility.

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10	Online Helpdesk Support System for Handling Complaints and Service	Cadelina Cassandra, Sugiarto Hartono, Marisa Karsen	2019	Web Technology	In existing system, The customer's complaint often not documented because the customer services record all complaint manually one by one and the amount of complaint increase day by day. The customer service often answers the same question rom different customer. There is no information for the customer about the progress of the complaint and it is difficult to monitor the complaint and report.	In proposed system, by Using Online helpdesk, customer can submit complaint in the web. The customer services will find a notification for new complaint in the system. There is a Frequently Ask Question in the system, so customer can find the common answers andsolve the problem by themselves. The customer service also can solve same problems quickly because all history of complaint and solution is recorded. The customer can find the notification for the progress of complaint by status in the system. With this integrated system between front end and back end system, all of the complaint history will be recorded easily, so manager can monitor everything. Thus the utilization of helpdesk system can reduce task, problem, and improve the customer satisfaction rather than waiting for the customer service to solve the problem. The benefit of this online helpdesk system for this service company will reduce complexity of customer complaints and needs using one system, and for the impact, it will increase customer satisfaction.