

# **Customer Care Registry**

## **Abstract**

Our application named Customer Care Registry is a kinda application that is used for providing services for an organization or management. The service or support is provided for an organization and then the solution is provided for the end users who are all using that organization's product or other things. The major and minor issues that are faced by the end users are solved by the helpdesk team. The issues are raised to the helpdesk team with the help of tickets. Using the ticketing system, the issues of end users are raised to the helpdesk team. Then, tickets are assigned to the agents and the agents will receive the tickets via Omni channels. The Omni channels are nothing but Knowledge based channels, Email, and live chat. Using these channels, the agent receives the issues on his dashboard. In the existing customer care registry application, we identified several drawbacks that have turned into problem statements. First of all, in the existing customer care registry application, a particular agent receives different kinds of issues in his single dashboard. Even though the agent doesn't know well about the issue, they need to solve that issue at the right time. While coming to the second drawback, in some channels, the status of the ticket is not shown. Whether the ticket has been closed or open is unavailable. At last, the third drawback is, that in the existing application, the tickets had been closed manually. This takes more manpower and time. Instead of closing the ticket manually, we can automate the process to close the ticket. The process will be, if the user doesn't make any response to the agent for a particular time period, then the tickets must be closed automatically. This automation process will save much time and we can use that manpower for any other purposes. And, that's it, our Customer Care Registry application will include all these kinda upgrades in it.

# Survey

## 1. Knowledge-Based Helpdesk System

***Author - Mohamad Safuan Bin Sulaiman , Abdul Muin Abdul Rahman , Norzalina Bt. Nasirudin, Khairiel Adyani B. Abd. Ghani , Abd. Aziz B. Mhd. Ramli , Mohd. Ashhar B. Hj. Khalid - 2012***

A knowledge-Based helpdesk system is a web-based system that is used to provide technical support to an organization or to management. Then, it acts as a Service Provider to that particular organization. The main objective of this Knowledge-based system is to provide technical support to the end users of a particular organization. Using this Knowledge-based Helpdesk system, an organization can improve their end user's performance and make their end users technically well educated. Once the Knowledge-based helpdesk system is designed, it is tested on the Information Technology (IT) center, Engineering Division (BKJ), etc. To have a better support solution for management, the Knowledge-based system is introduced. Usually, the Knowledge-based system consists of questions that are frequently raised by the end users. All the frequent questions are combined into categories and then, it is provided as a solution. The end users can solve their problems manually by themselves just by reading and implementing the solution that is provided. Also, the solutions that are provided by the helpdesk team can be used on future problems too. Hence, it is called a continuity and contingency process.

## 2. Automated Ticket Routing System

***Author - Muhammad Zikri bin Zulkifli - 2011***

In the existing helpdesk system, the tickets were created and assigned to the end user manually. When the ticket is created, it is assigned to the agent manually before they attend that specific ticket. This manual process of ticket creation needs more manpower and takes more time. Instead of putting the effort and time into this task, the ticket creation and assigning can be done automatically when we

create an Automated Ticket Routing system. The automated ticket creation and assignment process reduce the time and then the manpower can be used for other purposes. Then, by using the manual ticket creation and assignment process, the distribution of good skill sets, and workload balancing will be missed out. Finding a good skill set and assigning the tickets to the specific skilled agent automatically is considered a good job distribution. Also, there might be a chance of tickets that are mistakenly routed to the wrong agent. Here, the wrong agent represents the sense that the agent doesn't know well about that particular problem or issue. If the tickets are mistakenly routed, then the resources may get wasted and a lot of time will be spent unnecessarily. Using the location, skill sets, work schedule, and workload balancing, the tickets can be routed automatically to that particular agent perfectly. We can execute the above process perfectly by categorizing the tickets based on the issues.

### **3. Smart Help Desk Automated Ticketing System**

*Author - Dhiraj Temkar, Sheetal Singh, Leema Bari, Prof. Snigdha Banga -2021*

Automated technical queries help desk is proposed to possess instant real-time quick solutions and ticket categorization. Incorrect routing of tickets to the incorrect resolver group causes delays in resolving the matter. It also causes unnecessary resource utilization, and customer dissatisfaction and affects the business. To beat these problems, the proposed "Smart Automated Ticketing System" supports supervised machine learning techniques that automatically predict the category of the ticket using the natural language ticket description entered by the user through a chat interface. It also helps in faster resolution of customer issues and sends them an email about the status of the ticket. This process assures customer satisfaction and also keeps the customers within the loop.

### **4. Corporate IT-Support Help-Desk Process Hybrid-Automation Solution with Machine Learning Approach**

*Author - Kuruparan Shanmugalingam , Nisal Chandrasekara , Calvin Hindle , Gihan Fernando , Chanaka Gunawaradhana - 2019*

In an organization, the Information Technology (IT) support help desk operation is an important unit that handles the IT services of a business. Many large-scale organizations handle engagement and requests with employees on a 24×7 basis. As with any routine tasks, most processes of the support help desk unit are considered repetitive in nature repetitive tasks such as entering information into an application, resetting passwords, unlocking applications, and credentials errors. The industry has now come to realize that many repetitive business processes and tasks can be automated by using Robotic Process Automation (RPA) bots or robotic processes automotive software bots. The idea is to take the repetitive workload and hand it over to the RPA bots so that the employees could focus on more value-adding tasks and decision-making for the organization. The RPA bot would also help to reduce human errors and make processes more efficient, which would finally result in cost savings and productivity increase.

## **Problem Statement**

This Application has been developed to help the customer in processing their complaints. The customers can raise the ticket with a detailed description of the issue. An Agent will be assigned to the Customer to solve the problem. Whenever the agent is assigned to a customer they will be notified with an email alert. Customers can view the status of the ticket till the service is provided.

Admin : The main role and responsibility of the admin are to take care of the whole process. Starting from Admin login followed by the agent creation and assigning the customer's complaints. Finally, He will be able to track the work assigned to the agent and a notification will be sent to the customer.

User: They can register for an account. After the login, they can create the complaint with a description of the problem they are facing. Each user will be assigned with an agent. They can view the status of their complaint.

## **Proposal Solution**

### **1. Administrator Internal Routing**

In the existing customer care registry application, the agent receives the tickets to solve the respective technical issues for the customer. Here the concept is, that the agent receives many kinds of issues in his single dashboard. The agent receives the tickets even though they are not specialized to solve the problem for the customer. For that problem, we need to identify the agent's particular skill set and we need to assign or route the tickets automatically to the agents. This problem is identified in the existing customer care registry application.

### **2. Delayed Response Automated ticket closing**

In the existing Customer Care Registry application, the tickets are closed manually. Manually in the sense that the agent closes the ticket's status manually. This takes more manpower and consumes more time. Instead of closing the tickets manually, we can automate the process to close the ticket. The process will be, if the user doesn't make any response to the agent for a particular time period, then the tickets must be closed automatically. This automation process will save much time and we can use that manpower for any other purposes.

### **3. Status of the ticket shown to the Customer**

In the old helpdesk system, if the customer or user makes a conversation via channels like Email or Livechat, the status of the ticket is not shown to the customer. This may cause the customer to overthink whether the ticket has been closed or not. And they may think a lot about whether the conversation had been closed or not.

### **4. In Case of System Failure in the Server Side from the Administration,Need for a Backup Retrieval.**

In the Existing Application of System,if the Administrator loses the control as in a case of a severe damage in the Computer Device.This may cause the flow damage to lose the data so retrieval needs a database under the Internet browser for retrieval of the account under consideration of the browser.And they may think to consider a good hope of data management and time management in case of such failures.