DARK Developments

Website:
https://kristenthomas868.wixsite.com/tickettask

ASSIGNMENT 2: Need Finding

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PROJECT IDEA

Ticket Task is a web application designed to provide customers with faster customer support and service from their relative Internet Service Providers (ISPs). Currently, there are many individuals relying heavily on their internet for the purpose of telecommuting and school, therefore internet connectivity issues pose an inconvenience to users, especially when they are not resolved immediately. Ticket Task is a priority ticketing system used to submit, sort, and assign technicians to help resolve internet connectivity issues clients may have with their Internet Service Providers (ISPs). This app provides an interface which will allow the user to submit a ticket. This ticket will contain both the customer's personal information and details about their issue. The system will then sort these tickets according to the highest priority, so a customer service representative (CSR) can view them and contact the customers. When the customers are contacted, the CSR will provide suggestions on how to rectify the issue, or the CSR may assign the ticket to a technician to resolve the problem.

This system is designed to make the entire process of receiving customer support effortless and efficient. Ticket Task makes it easier for the customer to request help in comparison to waiting indefinitely on a customer support call or in their respective ISP's online chat box. It allows the CSR to effectively manage requests and provides the technician with the relative information which can make their job easier. Internet Service Providers will also benefit from this system, as it will aid in the operation of their customer support system easier, therefore increasing their quality of service to the customer.

STAKEHOLDERS AND USERS

The main users of Ticket Task will be customers, customer service representatives and technicians while the major stakeholders will be Internet Service Provider companies such as Digicel and Flow etc. Customers who are experiencing problems with their internet connection can use this application to create and submit tickets which would contain their personal information and details about the current issue. Customer service representatives will be able to add, view and communicate with customers as well as dispatch technicians to fix the customers' connection if needed. The technicians will be able to view the customers they have been assigned and mark jobs as completed. Additionally, the major stakeholders (ISPs) will be able to implement this system in their company as it will make the customer support system much more efficient.

This system will be relatively easy to navigate and operate by all levels of users due to the simplicity in design. There will also be a small tutorial for novice users on how to navigate the site by using pop ups. The customer service representatives and the technicians will not require much experience as they will be regular users, however a training session will be arranged. During this training session, both parties will be taught how to use the site and conduct various tasks such as viewing tickets.

The users of Ticket Task who will be evaluated are customers.

RESEARCH METHODS

SURVEY

Due to the COVID-19 pandemic, engaging users proved difficult but with use of a survey method - a great deal of users was acquired with ease. The survey was compiled using Google forms and distributed to a total of 28 participants. This allowed for a wider range of answers from customers of different ISPs. This method also allowed the development team to accumulate quantitative information which was instrumental in designing Ticket Task. This report consists of various opinions on several ISPs. The focus was mainly on customer satisfaction. However, additional focus was placed on the following areas: lack of customer and company knowledge and data for improvements. The major findings of the survey can be seen below with the use of graphs.

- Out of the 28 users, 75% did not utilize the Frequently Asked Questions (FAQ) page to resolve their issues, whereas 25% of users did.
- 42.9% of users commented that the FAQ page was not very helpful.

The FAQ page may be a daunting aspect for the regular user, especially if the issue is not easily resolved. ISPs can address this by observing how their user interface affects the user. FAQ pages should be easy to understand and traverse- too much data can make a regular user uncomfortable and the user how to proceed. With Ticket Task, a friendly user interface and a responsive admin would reduce these misunderstandings and increase how users respond to the FAQ page.

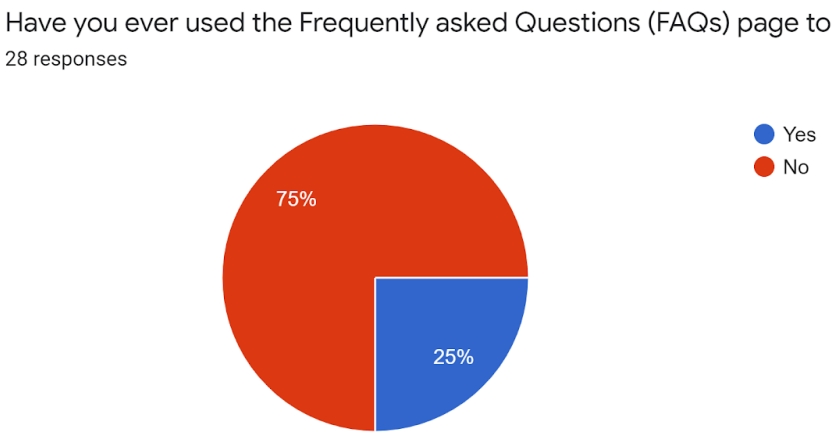


Figure 1: Pie chart displaying the number of users who use a FAQs page.

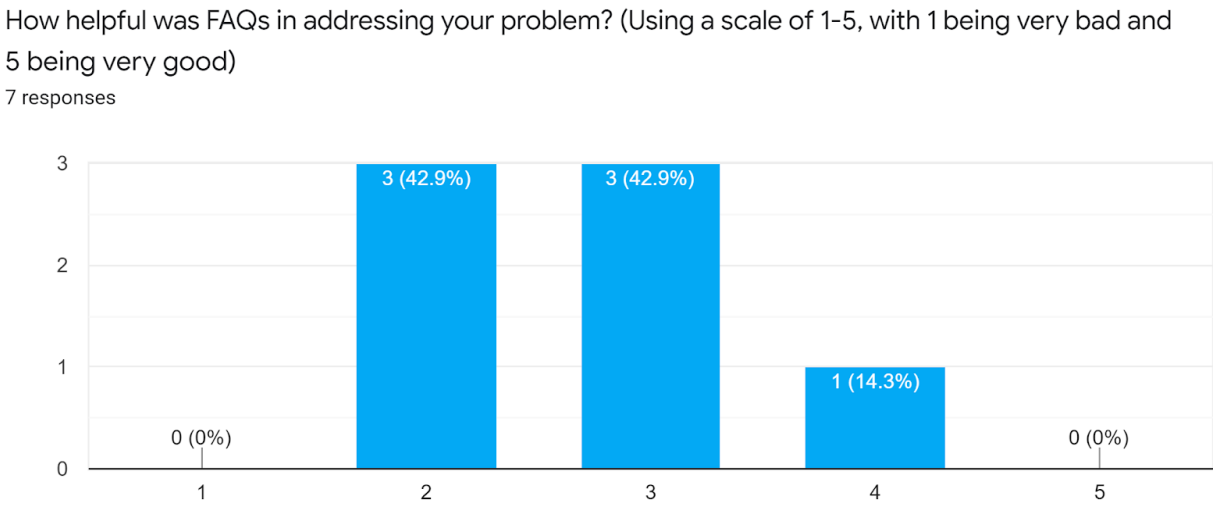


Figure 2: Bar chart displaying the number of users who think the FAQs page are useful in resolving their problems.

- 74.1% of users contacted their ISPs with a form of complaint with 94.7% of users contacting via the phone.
- Additionally, 26.3% of users commented that their average wait time was between 5-10 minutes, but this was closely followed by 21.1 % of users having an average wait time of 30 -60 minutes.
- 68.4% of users' issues were fixed between 5 -10 minutes, however 23.1% of users had to wait over a day for their issues to be resolved.
- 85.7% of users' issues required a technician to be resolved. The response time for these issues were split between wait times of 2-3 days and 2 weeks.

This significantly increases a user's average wait time of a customer between 20 mins for a customer service representative (CSR) and 2 weeks for a technician for an issue to be resolved. Based on the results, it can be deduced that a long wait time for a CSR and technician can decrease customer satisfaction and later customer loyalty. Furthermore, a decrease in customer loyalty can drastically affect a company's revenue.

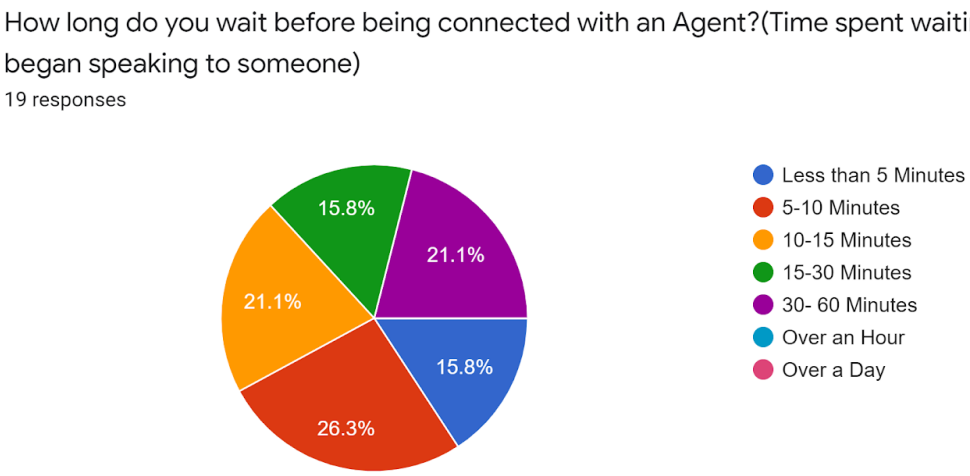


Figure 3: Pie chart displaying the average wait time of customers before they are connected to a CSR.

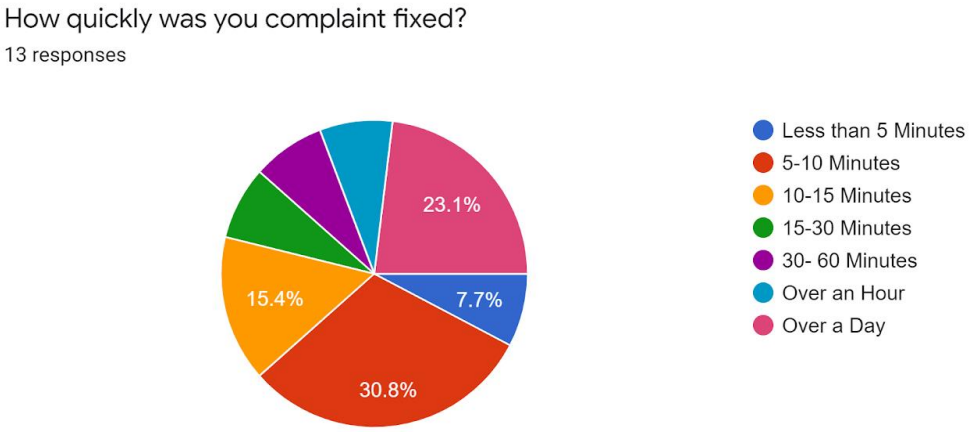


Figure 4: Pie chart displaying the average time period a customer waits for their complaint to be addressed.

In conclusion, the report addresses how customers require a reliable service especially in pandemic. It also addresses how a friendly user interface can greatly increase user interaction and decrease the need for phone calls to resolve issues. It also observes how a drastic wait time can negatively affect customer satisfaction and loyalty.

Survey Questions

1. Please indicate your age group.
2. What is the general area in which you reside?
3. Who is your current internet provider?
4. How long have you been using this provider?
5. Do you rely on your internet for telecommuting? (School or Work)
6. Have you ever the Frequently asked Questions (FAQs) page to resolve a problem?
7. How helpful was FAQs in addressing your problem? (Using a scale of 1-5, with 1 being very bad and 5 being very good)
8. Have you ever contacted customer support with a complaint?
9. What method is used to contact customer support?
10. How long do you wait before being connected with an Agent?
11. Was your complaint addressed by using the above method?
12. Did a technician have to visit your home to fix it?
13. How quickly was your complaint addressed?
14. How do you describe the professionalism and knowledge of the support staff? (Using a scale of 1-5, with 1 being very bad and 5 being very good)

Figure 5: Survey Questions

INTERVIEW

The second research method that was utilized was interviews. This method was selected because it was the most effective approach to collect qualitative information from customers. This research method allowed the use of open-ended questions, which enabled the interviewer to gather in depth information about customers' internet service provider experiences and thoughts on their customer service. Additionally, by using interviews, designers of the system were able to fully understand the user's reasons for selecting their relative ISPs, their opinions on their ISPs, as well as their experiences using their respective ISPs. Information related to the satisfaction of customers' ISP customer service was also gathered. This information will allow the designers of Ticket Task to make an educated assumption as to what the customers' desire in a new system.

Six (6) users were interviewed via an online Zoom call to acquire this information. After analyzing the data, a total of three (3) users were happy with their respective ISPs internet service, whereas the remaining three (3) were unhappy with their ISPs internet service. Customers of Digicel and Amplia said they were happy with their service and did not experience internet connectivity problems often. However, the two (2) customers of Blink were both dissatisfied with their ISP's internet and customer service. Both customers mentioned when they experienced internet connectivity problems, they both tried to contact Blink using their online chat box, telephone number and one (1) customer even visited their store to voice his complaints. However, each customer received dissatisfactory service and horrible customer service. They also both had to wait on the online chat box and on the phone for long time periods to relate to a customer service representative to resolve their problems. When questioned as to why they have not switched ISP, both customers mentioned there are no other available ISPs in their area. Furthermore, the one (1) customer of Flow also mentioned she was displeased with Flow's customer service since she had to wait for long time periods to relate to a CSR on their online chat box.

She also stated that she considered Flow's website to be not user friendly and confusing to a novice user. Lastly, the last user who was interviewed said he liked his ISP, RVR International, however he experiences internet connectivity problems whenever there are heavy rainfalls.

In conclusion, half of the interviewees liked their ISP whereas the latter strongly dislike their ISP for both the poor internet service and customer service. Three (3) customers also complained about long waiting times to communicate with a customer service representative. These findings solidified the reasoning behind the development of Ticket Task as it will provide a quicker way for customers to contact their ISPs as well as an easy user interface for customers to operate.

The interview questions and answers for the six (6) respondents can be seen below along with proof the interviews were carried out via pictures.

Interview Questions

1. Where do you live?
2. How many people in your household use the internet?
3. Who is your internet service provider?
4. Why did you choose this internet service provider?
5. What is your internet speed?
6. Are you happy with your internet service provider?
   If you are not happy with your internet service provider, have you ever considered switching your internet service provider?
   If you have considered switching your internet service provider, why haven't you?
7. Is your internet service provider cost effective?
8. Is your internet service provider reliable?
9. Do you experience internet connectivity problems often?
   If yes, do you contact your internet service provider to explain the problems?
   If yes, how do you contact your internet service provider via call, their website or in person?
   Are you satisfied with their customer service when you complain via call?
   Are you satisfied with their customer service when you complain via their website?
   Are you satisfied with their customer service when you complain in person?
10. Are you satisfied with your internet service provider's customer service?
11. If no, why are you not satisfied with their customer service?

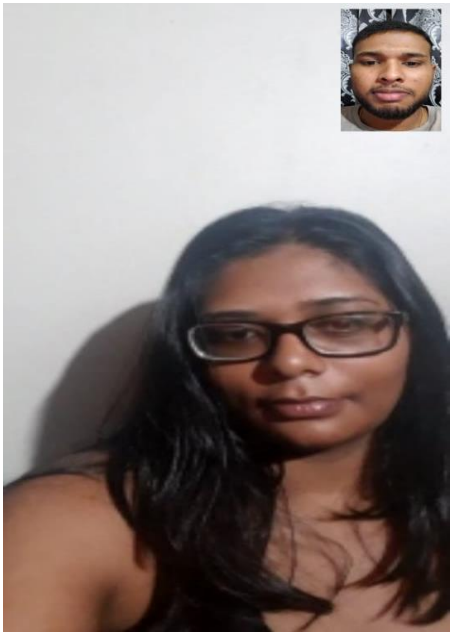
Figure 6: Interview Questions

Interviewee #1

Interview #1 Answers

1. I live in Arima.
2. 5 members of my household use the internet.
3. Blink (Bmobile)
4. This ISP was chosen because they are the only internet service providers who work in this area.
5. 10mbps
6. No we are not happy with Blink.
   Yes I have considered switching my isp, however they are the only one who work in this area.
7. No they are not cost effective.
8. No they are not reliable.
9. Yes, we experience internet connectivity problems often.
   Yes we contact them. We contact them via phone call, and if the internet doesn't work for days we go in person.
   No we are not satisfied with their customer service via call or in person.
10. No, we are not satisfied with my internet service provider's customer service.
11. We have to wait for long time periods on the phone and when we go in person, the csrs are very rude and are not helpful.

Figure 7: Interview #1 Answers



Interviewee #2

Interview #2 Answers

1. I live in Princes Town.
2. 4 people in my household use the internet.
3. I have Digicel.
4. Flow was not helpful when it came to diagnosing problems. There was also a lot of downtime.
5. 40Mbs Download 40Mbs Upload.
6. I am very happy.
7. Yes, Digicel is cost effective.
8. Yes, they are very cost effective.
9. No, I do not experience connectivity problems often.
10. Yes, I am satisfied.

Figure 8: Interview #2 Answers

Interviewee #3

Interview #3 Answers

1. I live in Penal.
2. 5 people in my household use the internet.
3. I have Amplia.
4. I chose this isp because they offer fibre.
5. My internet speed is 1gbps for downloads and 500mbps for uploads.
6. For the most part yes
7. Yes, my isp is cost effective.
8. Yes, my isp is reliable.
9. No, I do not experience internet connectivity problems often.
10. Yes, I am satisfied.

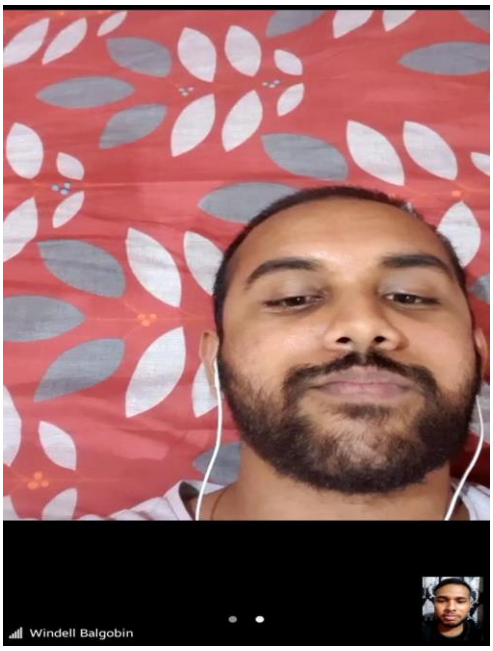
Figure 9: Interview #3 Answers

Interviewee #4

Interview #4 Answers

1. I live in Palmiste.
2. 3 people in my household use the internet
3. Flow is our internet provider
4. It was readily available and widely used.
5. 50 Mbps Download and 10 Mbps upload I think
6. Sometimes - No I haven't considered switching
7. No
8. I would like to think so
9. Sometimes - Yes we contact them through their website. No, we are not satisfied with their online service. Their website is not user friendly and confusing, also I don't think our issues are heard at times and they often take long time periods to respond.
10. No, I am not satisfied with their customer service.
11. They're not very helpful with issues and lack customer service skills.

Figure 10: Interview #4 Answers



Interviewee #5

Interview #5 Answers

1. I live in George Village, Tableland.
2. 2 people in my household use the internet.
3. RVR International (Bakey's cable service) is our internet provider.
4. It was faster than Blink and other people recommended it.
5. 40 mbps.
6. Yes I am happy with my isp.
7. Yes, it is cost effective.
8. Yes, it is reliable.
9. Not often, only during heavy rainfall.
10. Yes, however I have never had a reason to interact with them much.

Figure 11: Interview #5 Answers

Interviewee #6

Interview #6 Answers

1. I live in San Raphael.
2. 4 people in my household use the internet.
3. Blink is our internet provider.
4. I did not like Greendot as it was slow so I switched to Blink. They are the only two ISPs available in our area.
5. 10 mbps.
6. I am not really happy with my ISP. Yes, I've considered switching however my only other option is Greendot and they are worse. There are no other available ISPs in my area.
7. Yes, it is cost effective.
8. No, it is not reliable.
9. Yes, I often experience internet connectivity problems especially when it rains. Yes when I experience these issues I try to contact them via call or using their website. I am not satisfied when I call to complain as I have to wait for long time periods to get a csr. I am also not satisfied when I use their website as it is very confusing and they also take long time periods to respond to me.
10. No, I am not satisfied.
11. They often take long to respond to queries and concerns via their website and on calls. I have to wait long to get a csr and when I do they often cannot help or are rude.

Figure 12: Interview #6 Answers

SECONDARY RESEARCH

Finally, the last research methodology used was secondary research. This method was chosen as it was a collation and/or synthesis of existing research, meaning someone has already taken the time to collect and organize the data. Therefore, making it easier for users to utilize and apply its findings. Articles focused on customer service and customer satisfaction were analyzed as it represents the core objective of Ticket Task.

Ticket Task aims to provide customers with the most ideal medium for the best customer service and convenience available. The following analysis considers several articles discussing the importance of the customer's experience and social media versus face-to-face customer service. It also discusses how convenience and customer satisfaction pose a great importance to the success of a company.

The customer experience is described as "Customer experience has been conceptualized as the customer's subjective response to the holistic and indirect encounter with the company ([38] Lemke *et al.*, 2010). Experience quality is defined as the perceived excellence or superiority of the holistic encounter. The growing interest in the concept of customer experience may be explained by its anticipated link with value creation ([48] Prahalad and Ramaswamy, 2004), customer loyalty ([26] Haeckel *et al.* , 2003; [41] Mascarenhas *et al.* , 2006; [51] Reichheld and Markey, 2006) and customer satisfaction ([50] Pullman and Gross, 2004)." It can be observed in this stand that letting a customer have a pleasant experience not only addresses their logical side but their emotional side also. To achieve this, Ticket Task implements a user-friendly interface. This will aim to enhance the user experience as a friendly user interface is relevant since it can create buyers from visitors to the website. This will become the interaction between the user and the website.

Customer Service (CS) through traditional offline channels has limitations: limited accessibility, slow responses, and restricted information sharing. The literature suggests that conducting social media–based CS can overcome the drawbacks of traditional CS channels and help firms achieve better business outcomes (Mangold and Faulds, 2009). However, the literature also highlights the risk of utilizing social media for CS (Gillin, 2009). This study began by investigating the relationship between social media adoption for CS and firm reputation. By sampling 115 firms and collecting data from five databases over 2007–2016, it was found that firms with increased use of social media–based CS have a higher reputation.

Face to face customer service interactions have several limitations, especially in the current pandemic. Social media customer service addresses these limitations of reduced accessibility, slow responses and restricted information sharing posed by face to face customer service.

Due to the current pandemic, face to face customer service has become quite limited and undesirable. This is because both businesses as well as customers are being very cautious. This has led to social media customer service becoming more popular as it is much more accessible. Therefore, the limitations of the current situation are overcome, and customer engagement is increased. Several technological advances can be utilized to generate and send the information needed to the technicians. This aids in the faster response time and customer satisfaction. These technologies can be used to cater to the four main aspects of customer services: time, reliability, communication, and comfort.

With the rise of customer expectations due to ecommerce, globalization and product unification, convenience is a major factor business need to consider enticing customers. Convenience is an essential part of customer service and is also a determining factor for many individuals. Therefore, by having

convenient services, this allows for your business to be set above its competitors. Additionally, this leads to customer loyalty as it shows a sense of care and effort from the business, towards the customer.

“Improving the level of customer service from the perspective of sustainability is essential for a company’s orientation towards ensuring customer satisfaction by customer loyalty.” This means that incorporating convenience, easy user interfaces and an overall good customer experience is very important for the customer. Therefore, Ticket Task aims to deliver these factors to the customer to provide the best possible experience.

REFLECTION

REFLECTION

A survey was utilized as the first research method. The process of generating questions to gather data required to implement our project proved time consuming and posed great difficulties. However, after several tries, we created great survey questions mainly generated towards customer service and satisfaction. The only issue encountered was the lack of users - we obtained 28 users which gave us a significant data pool to work with, but we hoped for more.

Interviews were utilized as the second research method. The process of conducting the interviews went significantly smoothly. The only two issues we experienced was finding an appropriate time to interview the customers as most people were busy with work or school. Additionally, we could not properly interview one individual as he was having internet connectivity problems, therefore we had to reschedule for a later date during internet off peak hours. Regardless of these two minor problems, the rest of the interviews went smoothly and without many difficulties aside from the occasional audio or video delay. The only thing I would have changed during this interview process would be the ability to conduct the interviews in person, however due to the pandemic it was not feasible. This would have allowed me to fully gather the required information and probe the interviewees as well as note if they were lying without the risk of internet connectivity issues.

The third method used was secondary research. Overall, it was quite difficult as it was very time consuming to find articles which were related to the topic. Initially, the focus was on trying to find sources which discussed the benefits of a system like Ticket Task. However, after a group discussion it was decided that articles which focused on customer service and improving it yielded better information. One of the main objectives of Ticket Task is to improve the customer's experience while using customer support. The articles used highlighted the importance of understanding as well as improving this experience, therefore it went hand in hand in supporting the overall project.

TASK EXAMPLES

TASK EXAMPLES

Task examples for Ticket Task are listed below:

Tasks for all users:

1. Sign in

   Task Goal: The user accesses their respective portals using their given login information

   Preconditions: The user has been assigned and received their login information from the ISP company.

   Expectations:

   - The user can access their respective portal

2. Create a ticket:

   Task Goal: Creates a ticket to submit to the database for processing by the application

   Preconditions: The user is currently signed in.

   Expectations:

   - The user creates the ticket successfully
   - Suggestions to fix the issue are displayed during ticket creation

Tasks for client of the ISP:

3. Update my ticket:

Task Goal: Update/edit already existing ticket based on new developments in the situation.

Preconditions: User is logged in and has a pre-existing uncompleted ticket.

Expectations:

- The user updates the information easily
- New suggestions for the updated issue are displayed

Tasks for Customer Service Agent of the ISP:

4. Search for client:

Task Goal: Searches for a client by given name, or customer ID number.

Preconditions: The agent must know the name or ID of the customer.

Expectations:

- The searched ID is found successfully
- The client's name, personal details and existing tickets are displayed

5. Update client ticket:

Task Goal: Update/edit already existing ticket of another user based on new developments in the situation.

Preconditions: The search for client ticket was successful

Expectations:

- The user updates the information easily
- New suggestions for the updated issue are displayed
- The user can update the priority level of the ticket

Tasks for technician of the ISP:

6. View Assigned List:

Task Goal: View list of assigned tasks.

Preconditions: User is signed in as technician.

Expectations:

- The technician views the list of tickets assigned to him, in descending order of priority.
- The user can select any ticket from the list to see further details about the ticket and client

7. Update Ticket as Completed:

Task Goal: Mark a ticket as complete

Preconditions: The technician has accessed the ticket from his list, and filled out how he resolved the issue

Expectations:

- The ticket would be marked as completed
- The ticket would be sent to a customer service agent to call the client to verify the job was done

REFERENCES

REFERENCES

- *Jüttner, U., Schaffner, D., Windler, K., & Maklan, S. (2013). Customer service experiences. European Journal of Marketing, 47(5), 738-769. doi:http://dx.doi.org.ezproxygateway.sastudents.uwi.tt:2048/10.1108/03090561311306769*

- *Ochocka, J. (2019, September 01). Directory of Open Access Journals. Retrieved October 13, 2020, from https://doaj.org/article/be5d19ccf7844582b3bedaaa7dd6a9f3*

- *Metz, D., Ilieș, L., & Nistor, R. L. (2020). The Impact of Organizational Culture on Customer Service Effectiveness from a Sustainability Perspective. Sustainability, 12(15), 6240. doi:10.3390/su12156240*

- *Guo, Y., Fan, D. and Zhang, X. (2020), "Social media–based customer service and firm reputation", International Journal of Operations & Production Management, Vol. 40 No. 5, pp. 575-601. https://doi.org/10.1108/IJOPM-04-2019-0315*