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Freshdesk - Ticketing system software in digital customer service

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Abstract

One of the most important factors to improve the customer's experience has been good, remarkably delivered customer service. Nowadays, with the growth of digitalization, it is irresistible for organizations to pay more attention to enhancing their digital customer service, in order to cope with the change in customer behavior and expectations. Applying a ticketing system has appeared as a good solution for better service management due to its interesting features. Freshdesk, the popular helpdesk software using a ticketing system, was selected as a subject and studied to demonstrate the potential advantages that it can offer to support agent performance.

The theory gave knowledge of the main concepts and their relations. The examples and reviews of Freshdesk were presented as references and a base to conduct the research. The chosen research method was a comparative study. The research was conducted under comparative usability testing form, with the idea to highlight the differences in functions between Freshdesk and Outlook, a common communication tool. The data were collected and reflected under two types: quantitative and qualitative data, to reach a comprehensive analysis of the research.

The results of the research suggested that adopting Freshdesk with ticketing system advanced the agent activities. Not only did it help to improve convenience, productivity, and time-saving, but also with the software, agents gain better control, visibility, and capacity to handle their tasks. The implications that the software provided benefit companies in the long term. As a conclusion, organizations could consider applying Freshdesk, or helpdesk in general, to change the way they served customers. The more consistent and organized the internal system was, the better the service provided.

Keywords/tags (subjects)

Freshdesk, ticketing system, digital customer service, agents, channels

Miscellaneous (Confidential information)

N/A

Contents

Figures

Tables

Charts

1   Introduction

1.1   Research background

The COVID-19 pandemic has changed customers' behavior and expectations of customer service. Customers have switched to digital channels. Along with the growth of digitalization, in the journal of Acquila-Natale et al (2022), the authors stated that "digital channels are now being intensively used; companies are rethinking their strategies—they are accelerating their use of digital strategies, for example, increasing their digital service offerings to remain competitive" (p. 439). For that reason, digital customer service has become one of the new areas that companies shall pay attention to, as well as seek for improvements to gain a competitive edge.

The idea of the topic was inspired by the author while she was working for company X as a Customer Support Agent in 2021. The company's decision of implementing Freshdesk, the modern helpdesk software using a ticketing system, has opened the reform of customer service operations. It is real ground-breaking compared with using other traditional methods to support customers, like Outlook, phone calls, Messengers, Skype, etc. From that point, the author found interest in the ticketing system. In recognition of its role in digital customer service, the author has decided to conduct study research as reference material for companies who may seek better digital customer solutions.

Another inspiration for the thesis is that the software Freshdesk has features that meet the current digital customer service trends. Nikkarinen (2022) in his thesis accentuated the most popular trends. They are in-time responses, seamless interactions, 24/7 support, automation, and omnichannel, where all the digital channels are connected to provide a cohesive experience (p. 15-16.) These are also the main features that Freshdesk offers to companies. Therefore, the thesis can take a deep dive to learn more about Freshdesk and its effects on digital customer service.

1.2   Thesis's topic, scope, and limitation

The thesis topic is about Freshdesk – a user-focused cloud-based support ticketing software with many valuable features for support organizations to improve internal and external communication and the speed of the service. Freshdesk advances a lot of aspects of working life. It enhances

transparency and reduces waste (time, effort, duplicated work, ...). In addition, Freshworks ensure its products are constantly updated and in line with market needs. The company provides customized versions of Freshdesk, so the company using Freshdesk can always approach new value-added features. Companies adopting Freshdesk are proven to improve their operation and working performance. The study of Freshdesk should be conducted to provide the readers with a basic understanding of how Freshdesk brings benefits and why it should be considered such a potential software.

The definition of digital customer service and the use of ticketing systems in digital customer service is wide. There are various methods and ways to improve digital customer service and applying a ticketing system can be considered one of the good approaches. For that reason, the author focuses on the areas where Freshdesk-the ticketing helpdesk influent the way companies operate digital customer service. There are many obstacles and limitations when the author chose this topic. Therefore, the research work will be conducted from the customer service representatives' perspectives, so-called agents' views during this paper.

1.3 Research objectives

The main aim of the research is to convey how adopting Freshdesk with ticketing system can enhance digital customer service for service agents. Freshdesk-related topics will be represented as a multidimensional picture through different approaches. From that, readers can increase their knowledge of Freshdesk, understand how and in what way the software supports customer service, and define what to expect when considering adopting the software.

Three key concepts will be adopted in the thesis: Digital Customer Service (DCS), Ticketing system, and Freshdesk software. These concepts build the core structure of the thesis. They are connected and support the research problems.

There are two research questions to be studied in the thesis.

1. How is the ticketing system used in digital customer service?
2. How does Freshdesk help agents to improve digital customer service?

A fundamental overview of the software will be presented to give the readers information about this prospective software. Both theory and research will be analyzed to affirm the improvements in customer support using Freshdesk. The connection between the ticketing system and DCS will be thoroughly explained. To emphasize the specialty of Freshdesk, it is essential to convey the advantages of applying Freshdesk. There may be discoveries of the software's disadvantages.

The theory and information in chapters 2 and 3 are mentioned as the common knowledge base. In the research part, the experimental test will be conducted to examine how Freshdesk can outstand the traditional communicating method in improving the agent's efficiency. The results then will be referred to the theory and expectingly not only to give answers to the research questions but also to reflect the potential of using ticketing software in improving customer service in general.

The outcome of the work would be a throughout study article about Freshdesk. All the necessary aspects shall be comprehensively covered, with all the main ideas demonstrated intelligibly. The findings from the research will be pretty analyzed and evaluated. Overall, readers can easily focus on the exciting topics and value the software affected by the mentioned conceptions in the thesis work.

2   Theoretical reviews

In this chapter, the author uses the theoretical knowledge gathered from different sources to define the meaning of digital customer service and ticketing systems. The influences of the ticketing system in DCS are also described, emphasizing the connection of topics.

2.1 Digital customer service (DCS)

2.1.1 What is digital customer service?

Nowadays, customer service plays an essential part in any type of business across industries. A definition of customer service is given by Chinunda (2011) who describes that it "covers all the activities that an organization carries out in order to meet the needs and expectations of customers". Ordinarily, companies provide support to customers during the lifetime of the

product or service. Sufficient customer service refers to the time "when reality meets or exceeds those expectations on a consistent basis". She listed the supporting activities that companies provide to their customers are varied from consulting, supporting, handling, and caring. (pp. 7-8.) These activities were conducted and delivered to customers via different channels.

There are different ways to support customers, both online and offline methods. According to DeLisi and Michaeli (2021), Digital Customer Service (DCS) is about "leveraging the digital entry points that customers tend to use and enhancing the interaction from there in a way that feels seamless, easy, and even delightful to customers" (p. 19). DCS is activities to provide support and meet the needs of customers through different digital channels like chat, email, text (SMS), social media, web apps, software, or combined. Taking this into consideration, DCS has appeared as a modern method to communicate with customers.

In recent days, with the sublimation of technology, internet-based communication means have gradually replaced traditional contact methods. Consumers may find it easier, faster, and more convenient to adopt mobile apps and web-based communications, which they use to connect with their families and friends daily, interact with, and seek company support. With consumers' expectations of receiving good customer care, companies have been shifting their communication methods to digital channels to consumer preferences. Like DeLisi and Michaeli mentioned in their book, in modern life, the existence of digital devices has become "the omnipresent centerpiece" and the adoption of digital channels can bring a "new layer of richness and depth to customer interactions" (ibid.). On the Salesforce webpage, it is mentioned that the companies have been using divergent customer preference methods to proactively deliver support on time (Salesforce, 2022). As such, the wide range of customer segments is to be well covered and managed.

2.1.2 The usage of digital channels

Digital Customer Service (DCS) is a broad term. Many different means can be involved in DCS, such as supporting customers via digital channels (messenger, email, chat box, etc.), interacting on social media, joining meetings through video chat, or applying automation solutions like bots. DeLisi and Michaeli (2021) pressed that DCS can be considered a tool allowing companies to "transition them between virtual assistance and live assistance in a way that is completely seamless" (p. 7). When any concern or issue arises, customers go online and start interacting with

the available digital channels that companies offer. They can ask questions in live chat, send messages, call for support to a digitized call center, etc. The frontline team, so-called agents, will receive the requests timely. The team will then seek solutions and respond to customers accordingly. After all, the theoretical process of how companies use digital software to support customers is simple and straightforward, aiming to give customers the support in the way they want effortlessly.

Digitalized customer service in business operations benefits both customers and companies who adopt them (ibid., pp. 13-23). A good choice of digital tools to support customers will help enhance customer experience, reduce customer and agents' workload, and improve customer management processes (Kingstone, 2019, p. 6). Digital support is considered an efficient method. It allows agents to work in multiple channels and with multiple customers simultaneously, leading to a reduction in costs and an increase the productivity. Another benefit of digital customer support is that the servants/agents are able to handle customer matters at a higher speed thanks to specified features set to collect required information (TeamViewer, 2022). Good digital channels enable agents with automation solutions and tools that help address critical pain points of the issue. As a result, the provided information is more relevant and exact, reduces the unprocessed backlog, and customers would receive the support and solutions in time. According to DeLisi and Michaeli (2021), applying a modern digital channel will not require "any trade-off or economic sacrifice", meaning it is a potential investment. They believed that digital transformation is a key for companies to accomplish remarkable effective outcomes, as well as reach future success (pp. 5-6.)

As there are many interesting digital channels for customer communication available in the market lately, choosing to apply the most suitable one has become a complex issue, not very hard to solve but needs lots of consideration indeed. It depends on companies and their expectations of what they expect to gain from the channel. Every company has different ways of management, strategies, and targets. In general, a good channel has to satisfy main criteria, such as being personalized to the company's purposes, easy to use by agents, reliable and with no disruption, comprehensively manage and control, having potential for optimization and development, etc. Overall, digital channels shall be a handy tool to improve customer service.

2.1.3 The role of digital customer service

Gerson (1998) stated that company's biggest revenue comes from repurchases, meaning it is important to maintain a good level of customer retention and loyalty (p. 3). On that account, creating a positive customer experience is essential. Kingstone (2019) wrote in her research that "digital experiences are the new heart of customer engagement" (p. 4). Carrying on the idea, in the workbook written in 2019, Wardley concluded that the core of DCS should result from the desire to "delight the customer to ensure a lasting relationship" (p. 2). DCS is customer-centric and its focus is improving customer service performance to keep up with customers' expectations.

In the bigger picture, at present, due to increased globalization trends, demands are increasing in complexity, where the networks are expanding alongside conveniences when access to different types of means. Thus, organizations need to be ready to adapt to the dynamic environment (Lewis & Mitchell, 1990, p. 11). According to the research written by Victor Hoong in 2013, three forces heavily affect a company's customer service level, which can be the determination for the win and loss in the marketplace. They are the rapid adoption of technology, the change in customer behavior, and the increase in competition. He believed that these forces have led to the focus on DCS (p. 6.) Since customer service can be considered a strategic function to assist companies in developing competitive advantages and approaching beneficial opportunities that lead to an increase in profit and turnover (Chinunda, 2011, p. 16), DCS can help to expose data about customers' needs, the aspects that might cause discontent, and issues that may occur when buyers consume the service provided. Victor (2013) expressed that one of the main challenges of leaders nowadays is the alignment of the increment in customer expectation and the acclimation to "the breakneck speed of technology" (p. 20). Therefore, the digitalization of customer service can be considered a key point to acquiring and retaining customers, facilitating new capabilities for organizations.

2.2 Ticketing system

2.2.1 Fundamental description of the ticketing system

In the journal of Gothil and Kumar (2019), the ticketing system was introduced as a contact helpline for anyone who needs help and support from the internal and external of the organization. The system is a module that gathers all the requests in one place and filters them

into different categories. It can automatically connect the query to predefined solutions set by the admin in the knowledge base or else transferred to the technician team for resolution. The system uses cloud-based software, meaning that it "provides solutions to all clients who are connected with one or more organizations remotely/within the infrastructure" (p. 155.) All the data will be stored and easily retrieved on demand.

In digital customer service, it is important for companies to have a tool, a system to keep track of and manage the workflow of agents. In the words of Vecchio, the ticketing system is defined as "a software platform designed to capture customer service requests and help your business manage that request all the way to resolution" (Vecchio, n.d.). Companies widely apply ticketing system as helpdesk software in the ever-changing environment, where the flow of requests from customers are huge and inconstant. It allows the agent to monitor the progress and deal effectively with the issue until it gets resolved. For that reason, all the requests of customers are followed up in time, saving companies from losses and dissatisfaction.

2.2.2 The basic operation of the ticketing system

The operation of the ticketing system is seamless. Sorsa (2021) described in her thesis that once the customer contacts the company describing their requests or concerns via any type of channel, e.g., email, message, phone call, etc., an opening ticket is generated in the system containing all the relevant data from the request. It is shared with the customer and the agent. The system automatically logs all the related data based on the email into one constant thread. In case needed, the past information can be reviewed. After the ticket is created, the agent can start working on the issue, planning what tasks needed to be carried out, and responding to the customer (p. 7.) All the communications, alerts, and updates between both parties occurred and are logged in the ticket, bringing immediate attention to adjustable interaction. When the issue is solved, the ticket can be closed. In some cases, instead of creating a new ticket, customers can reopen tickets if there are more concerns and requests or follow-up questions (Vecchio, n.d.). This way the customer can reconnect with the agent who understood the whole problem before, saving time and effort for both sides.

The ticket management system defines tickets and filters them into different elements, like the topic, category, urgency, importance, etc. It helps the tickets to be distributed to the right contacts

that have abilities to resolve the matter (Cybrosys Technologies, 2021.) Additionally, the higher prioritized tickets will be taken care of first, allowing agents to work with more challenging requests, whilst the repetitive requests can be addressed promptly by designated solutions as they are already recorded in the system base, thus improving the resolution time (Rogerson, 2021).

2.2.3 The impact of the ticketing system on digital customer service

Belevska (2022) considered that one of the fundamental approaches to good customer service operations is a ticketing system. She expressed that "ticketing systems help streamline the support service processes, which, in turn, improve the customer experience" (para. 4.) Owing to the fact that the main aim of DCS is to align with customer expectations, the ticketing system is a method to provide customers seamless, proactive, and in time experience.

The benefits of ticketing systems are countless and undeniable for all involved parties in digital customer service. Firstly, for agents, on the Y Meadows website, there is an article about how agents can benefit from the ticketing system. The workflow is more organized and productivity is improved. It allows agents to work with less effort but more efficiency with the help of the system's modern features, such as AI support, personalization, interactive interface, etc. (Y Meadows, 2021.) Secondly, for the management team, the ticketing system not only supports them to monitor the agent's performance but also help to identify weakness and opportunities for improvement. The progress and interactions with customers are closely managed, therefore ensuring the committed service level (Cybrosys Technologies, 2021.) Finally, for customers, the ticketing system provides customers with 24/7 support, anytime and anywhere within a touchpoint. Customers will likely receive quicker service accompanied by better response and resolution. In the end, the relationship between customers and companies is empowered, and their satisfaction and loyalty to the brand will be accelerated.

3   Freshdesk

An overview of the software's definition, background, and features is mentioned. In this chapter, the author focuses on highlighting the benefits of Freshdesk by analyzing three different case companies which successfully implemented Freshdesk. Additionally, the disadvantages are also

revealed based on the feedback of users and the author's personal experience with Freshdesk. These studies can be considered theory-based for the research objectives.

3.1 Introduction of Freshdesk

3.1.1 Freshworks

Freshworks was formed in October 2010 by Girish Mathrubootham and Shan Krishnasamy, founders from Chennai, India. The founders were both former staff of Zoho Corp, which was at the time the biggest business software in India. San Mateo, California was chosen place to build the headquarter of the company. Nowadays, Freshworks operates in 13 locations and has over 5,500 staff across the world (Allen, 2022). The company provides cloud-based software products for different types of businesses, especially for small-scale businesses and startups in various industries like healthcare, finance, traveling, media and entertainment, manufacturing, education, IT, etc. Over 140,000 organizations in 145 countries are the company's customers, mainly located in the US and Europe. The big brands chose Freshworks products to mention like Honda, Bridgestone, Hugo Boss, University of Pennsylvania, and Toshiba (AASC, n.d.). In September 2021, Freshworks has valued 12.2 billion dollars in the market (Bhalla, 2021).

In the beginning, the company was named Freshdesk. However in 2017, Freshdesk was rebranded to Freshworks Inc. Freskdesk then has become one of Freshworks' software names (Freshworks, n.d.). Freshworks aims to provide customer solution software, which has affordable prices and still comprehensively covered all the needed features. Apart from Freshdesk, the company's other software are linked and support each other, making daily life business more convenient. Freshdesk was the first product of the company. The company then developed and added more functions to its products, like IT service management (Freshservice), customer relationship management (Freshsales and Feshmarketer), and human resources management (Freshteam) (Allen, 2022). The company wants to bring the most satisfaction to both customers and companies. In Figure 1 there drawn the relationships between Freshworks software.
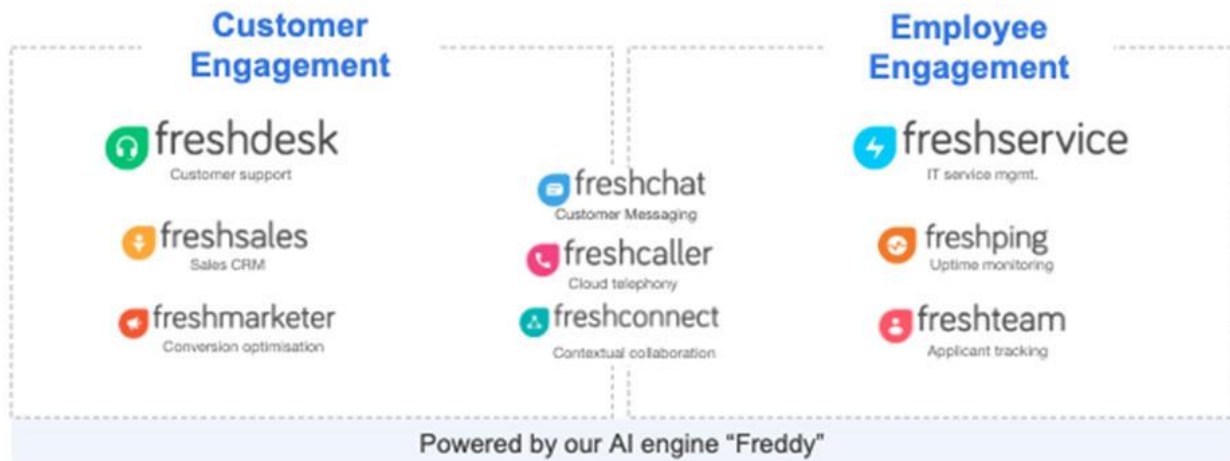
Figure 1. Freshworks's products

3.1.2 Freshdesk

Freshdesk was first launched in June 2011. In the journal of Jois et al (2019), Freshdesk is considered "one of the leading SaaS (Software as a Service) cloud-based customer support software" (p. 1). Mr. Girish formed the idea of Freshdesk as a tool to provide "customer support solutions that leverage social media". It is a popular helpdesk dedicated to different-sized companies in varied industries (ibid., p. 2.) It uses a ticketing system and other features to provide companies with "the most complete support solution with the fastest time-to-value", in other that "delight customers effortlessly" (Freshdesk, n.d.).
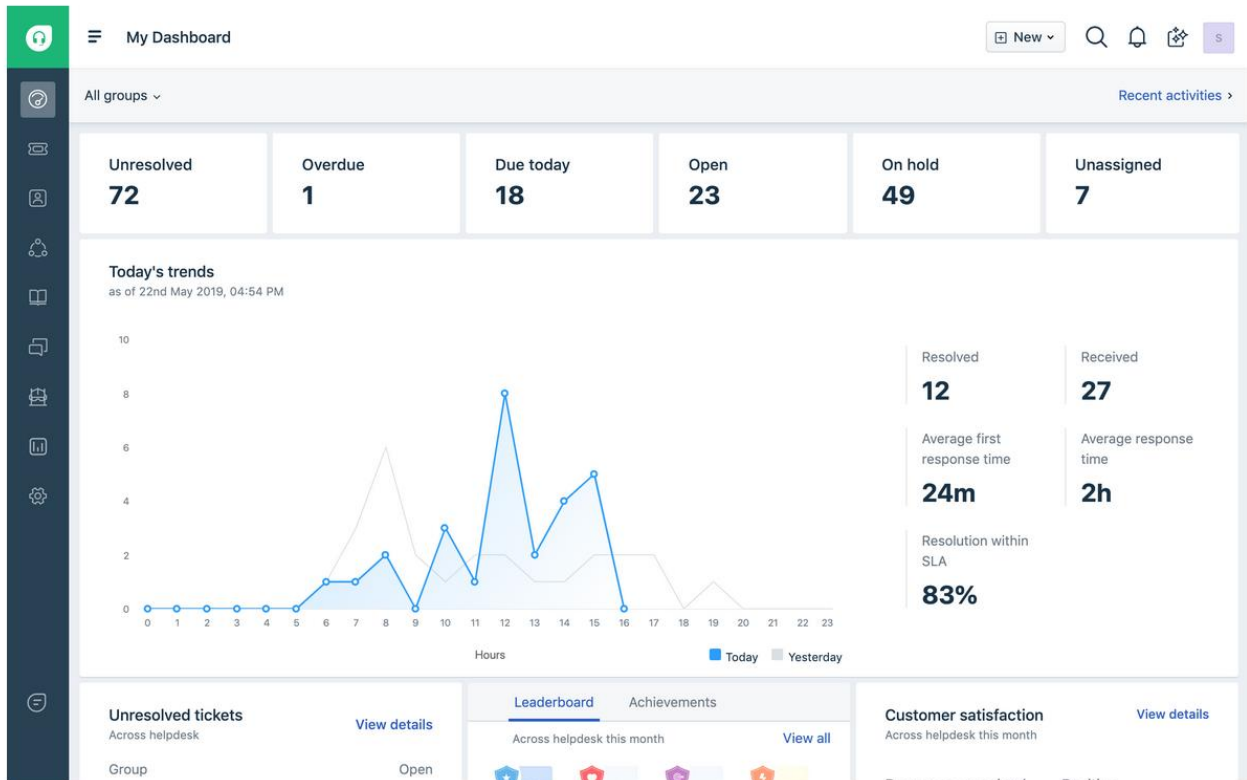
Figure 2. Freshdesk dashboard

Figure 2 display the main dashboard for Freshdesk's users. On the left-handed side, there is a selection of functions where you can get access to the dashboard, tickets, contacts, knowledge base, reports, etc. In the main window, it is an overview of the current ticketing status filtered by defined groups or products. There are summaries and quick views of the trends, performances, and customer satisfaction statistics.

Figure 3. Freshdesk ticketing interface

Figure 3 presents the ticketing interface of Freshdesk – where agents carry on their tasks. On the top, there is a bar for searching, opening a new ticket, and getting notifications. On the right-handed side, there are filtering options for displaying tickets. The tickets are presented with tags and labels in the middle of the page. Overall, the interface is friendly to use and easily navigate.

3.2 Main features and pricing

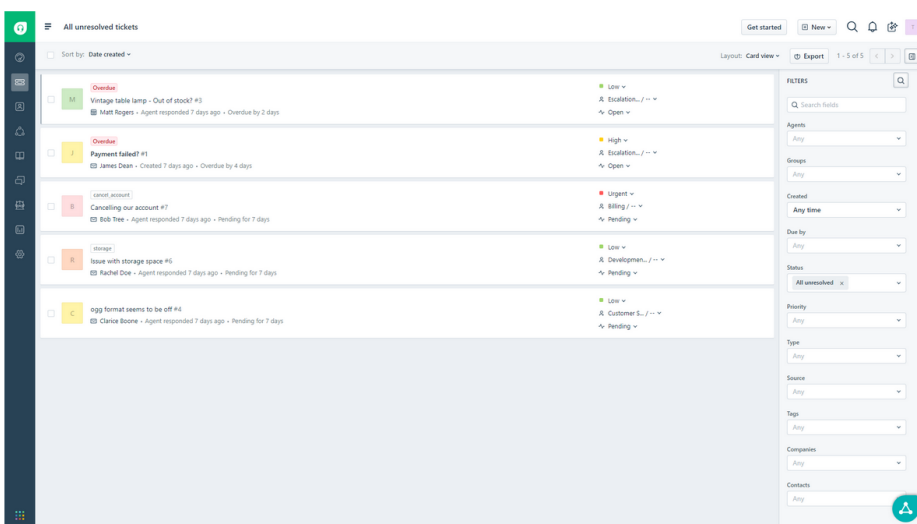Freshdesk offers many great added functions besides the fundamental ticketing system. According to Freshworks/Freshdesk webpage, they are categorized into six main features below. The author chose not to list all features and functions of Freshdesk in this thesis work because it is such a wide range. Narrowly, the most common-used and popular ones are mentioned.

Ticketing: Freshdesk operates based on a ticketing system. It is the core structure of Freshdesk. Like other ticketing software, the main functions of Freshdesk are tracking and managing support requests from multichannel into one shared inbox under the ticket form. Besides working and closing a ticket, agents can view and define its statuses and activities at all times, and set deadlines for response and resolution (Service Level Agreement – SLA Management).

Collaboration: Freshdesk allows agents to work in a team and collaborate to solve the issue comprehensively. Tickets can be shared with other agents/experts/departments, linked to other tickets with a similar issue, merged to avoid duplicates, and divided into smaller tasks with the parent-child ticket so agents can work simultaneously. The agent can transfer the ownership of a ticket, add private notes, or open a discussion with other colleagues so they would follow up on the matter. Every update and change of a ticket will be notified to all agents in charge to keep visibility.

Automation: Automation is the key feature to fasten digital customer service. Once a ticket is entered into the system, it can be automatically dispatched into defined groups and assigned to available fitted agents. The ticket will be categorized and prioritized automatically or also manually. Agents can "perform multiple actions on a ticket with a single click by automating

repeated actions", or use canned responses to reply to common and repetitive questions (Freshdesk, n.d.) Moreover, there are many other automation functions dedicated to customers for self-service.

Customization: Companies have the ability to select customs apps, modify and add more fields into ticket form, and "give differential permissions for access and actions according to the roles and responsibilities of agents" according to the need of their business (Freshdesk, Features). For agents, they can customize the Freshdesk layout and portal to be in line with their working style and maximize convenience.

Field service management: A ticket may require several tasks to complete. Tasks created and fulfilled should be tracked carefully by agents. Agents can set appointments and edit tasks in their scheduling dashboard, which give them a complete view of tasks' statuses and deadlines for agents to keep up and distribute the workload effectively. The time tracker in Freshdesk allows agents to track their time spent on any activity and measure their productivity.

Analytics: This feature allows the companies to control and monitor the activities of each agent, and measure their performance based on open/closed tickets. Freshdesk provides real-time data in dashboards for companies to improve efficiency. Custom reports can be generated for leaders to have an overview of scheduling, trends, and customer satisfaction ratings.

Depending on the functions and features that Freshworks offers, there are different price ranges for leveled-up packages. Sorsa (2021) suggested that enterprises should consider carefully what features come with the subscription plan and estimate carefully what is needed or not needed (p. 9). Freshdesk is divided into 4 sub-divisions named Omnichannel Suite, Support Desk, Contact Center, and Customer Success. The Omnichannel packages are more popular selected by organizations as Freshworks states that "each agent on Freshdesk Omnichannel has access to all features from Freshdesk Support Desk, Freshchat, Freshdesk Contact Center, to support customers across channels from one place, with all the context and customer information" (Freshdesk , n.d.) They have all the features of all the other divisions combined. On the Freshdesk Pricing webpage, the most optimal subscription plan is called Enterprise Omnichannel for $99 per agent per month

billed annually ($119 if billed monthly). The advanced features offered in this plan are all-typed bots, omnichannel routing, IP range restriction, advanced ticket scope, and so on.

3.3 Benefits of Freshdesk in relation to DCS in the service agent view

As the digital era has become more and more developed, customers expect to have seamless, integrated, and positive interactions with organizations. To provide customers with a smooth and convenient experience, companies should adapt to modern technology trends at the apparent time, and one of them is omnichannel (Hoong, 2013, p. 12). With the up-to-date omnichannel function, Freshdesk allows the company to combine different digital channels that are formed to complement each other. Agents can use multichannel simultaneously and freely switch between them, at the same time avoiding duplicated data (ibid., p.11.)

Freshdesk's ticketing management is as good as other ticketing software in the market (Brame, 2019). Sorsa listed a few benefits of the ticketing system in Freshdesk. Agents will find it easier to keep track of the tickets and tasks and ensure the resolving efficiency. The low-priority, unnecessary activities can be eliminated by automatically setting up functions, saving much time, value, and effort for companies. The system keeps track of the time spent, giving the agents manage the workflow better at their speed and convenience (p. 18.)

Freshdesk is a great tool that enhances working in teams. It creates an environment where all the stakeholders and team members can work together, and join resolution internally, leading to more effective and faster solutions. This led to creditability and improvement in the support service that customers receive. It improves the consistency in response to customers due to the transparency and visibility of the communications and activities of the tickets (Freshdesk , n.d.)

Freshdesk helps the management team to leverage resources. Leaders can ultimately Freshdesk as an analytical software to monitor the whole current situation and address any disruption. The performance of each agent, the status of the tickets, and the customer satisfaction level can be analyzed and reported anytime. The developing department can utilize Freshdesk to gain insights and identify bottlenecks, find areas that need to be improved, and seek future opportunities and trends (Sorsa, 2021, p. 18.)

There are many benefits that Freshdesk can deliver to improve digital customer service than just ordinary ticketing software. Its goal is to make each service agent a champion with less effort and more efficiency (AASC, n.d.) Every feature and function of Freshdesk is designed to advance the productivity of agents, leaders, and companies, at the same time enhancing the relationship with customers, which will become a competitive edge for companies to thrive.

3.4 Examples of company case studies

Freshdesk has many customers with stories of how Freshdesk has changed and improved the way they operate, bringing many outstanding outcomes. The author selects three real-life company cases from different industries and countries to mention, in order to emphasize the role of Freshdesk and ticketing systems in digital customer service.

3.4.1 7-Elevent Philipines

Originating in the US in 1927 as the first convenience store in the world, 7-Eleven nowadays has become one of the most recognized "convenience store brands" in the global retail industry (Freshdesk, n.d.). In 1982, 7-Eleven began its journey in the Philippines and expanded to 3000 stores in this country today. Before Freshdesk, 7-Elevent Philipines left their customer support in the hand of an external vendor partner. However, their growth in operational scope led to a huge increment in support demand. Additionally, the company realized that they have limited visibility and transparency in the vendor's performance and the way they handled customers' requests. 7-Eleven then formed an internal support team, as well as sought helpdesk software as a solution to take control over digital customer service and gain insights from customer analytics.

Freshdesk was chosen to be the best fit for 7-Eleven Philipines at the time. Any type of requests and concerns are gathered from all digital channels through Freshdesk to the central support team. The Freshdesk feature that has brought the most influence on 7-Eleven is scenario automation. The company actively interacted with customers via social media and constantly received promoting responses, thank-you responses, responses with emojis, etc. The scenario automation functions helped the company to save a great amount of time by automatically filtering and non-covering these responses into tickets. Canned response options in Freshdesk also

were utilized for common repetitive queries. These functions reduced the effort of agents as they did not need to open and check every unnecessary ticket.

Freshdesk has improved the productivity of both agents and managers. Agents of 7-Elevent found it was very simple and convenient to use Freshdesk. Aeruh J.Dimalanta, Customer Care Specialist, disclosed: "All the icons on the dashboard are also very self-explanatory, which makes it easy to train and onboard new agents onto the solution." (ibid.) For the managers, the Analytics feature provides them with huge support in observing the big picture of the current situation and keeping track of the agents' performance. According to team leaders, dashboards and reports generated from Freshdesk were more reliable as they are based on realistic data, such as response time, resolution time, the number of opened/closed/abandoned tickets of each agent, and so on. From that, the management team could monitor the request variations and navigate their operation correspondingly.

Thanks to Freshdesk, 7-Elevent Philipines had reached SLAs 98% and 95% in ticket resolve and call resolve respectively. Allian M.S.D.Cruz, Business Process Innovations Consultant, on the behalf of the company expressed their satisfaction towards Freshdesk: "We see Freshworks as a partner that we can work with for a very long time because we are happy with how we are able to perform" (ibid.) In the future, the company has plans to purchase more licenses from Freshdesk, which would even fasten the resolution time.

3.4.2 Shiptime

Shiptime was established in 2008 as a service agency in the logistics industry in North America. The company helps small businesses all around North America with shipping solutions and allows customers to select the best shipping options and track shipments domestically and internationally. Nowadays, Shiptime has over 60,000 customers globally and more than 5000 customers use the service every week (Freshdesk, n.d.)

The company always pays attention to customer support as it is a key for them to earn the attraction and loyalty of customers. However, during the pandemic time, people started to purchase more, and thus the shipping demand skyrocketed. The Inbox was no longer an effective tool for managing such a rapidly-surge number of queries from customers. Dave Wilson, Vice

President of Operations, explained that the situation then was challenging as agents found confusing to find, filter, and follow up on emails from customers. Shiptime has selected Freshdesk as a solution to overcome the chaotic scenario, with the expectation that the "customer service team stay organized and track support tickets better" (ibid.)

The collaboration feature of Freshdesk gave Shiptime team the transparency of each ticket's ownership, hence eliminating the abandoned or lost queries and ensuring all tickets were handled properly. The feature, automation, also helped Shiptime to reduce the burden on agents' hands. The company made use of the answer bot to quickly assist customers in repetitive situations, automating workflows to automatically categorize the tickets into correct groups, and auto-response to save the interactive time of each agent per ticket. In addition, Shiptime has built a detailed internal Knowledge Base to instruct agents in finding suitable methods and solutions for each inquiry.

With Freshdesk, Shiptime enables customers to contact them via any channel, ensuring that they are present and always available for the customers. Dave stated that "Freshdesk has helped us communicate better with our customers using different entry-points like email, chat, call, or web portal based on what kind of communication method they (the customer) prefer" (ibid.) In the future, the company has planned to adopt recorded voice messages, so customers don't have to wait for the agents to guide them with common questions.

3.4.3 Cloudia

Pekka Ikonen, in his bachelor's thesis in 2016, wrote about the case study of Cloudia. The company was founded in 2008 in Finland. It is a consulting and service provider that focuses on providing procurement and contracting solutions for all-size organizations. Before Freshdesk, the company served customers via phone calls and emails. By the end of 2015, due to the expansion of the product range, as well as the company has shifted its focus to contract management, Cloudia had decided that the previously used customer service software, Kayako, was no longer covering all the demands. The company started to look for new software which has good customer database maintenance and better support management (ibid., p. 22.)

Freshdesk was implemented by Cloudia in January 2016. With many useful features, Freshdesk has proven to provide great support for the company. The automation features were undoubtfully beneficial. Similar to Shiptime, auto-responses, auto-filters and canned responses were the most common-used. Besides saving time for agents, these functions would also "reduce ambiguities in support requests and thus reduce unnecessary contacts with technical support" (ibid., p. 40.) Another feature that Cloudia found useful was Analytics. The company had to send its customers reports monthly regarding the processing of support requests. With the help of the versatile functions of Freshdesk, reports about the schedule, customer segments, and status of support requests were generated effortlessly with better validations, which decreased the data processing manually (ibid., p.41.)

Cloudia defined the service level agreements for each customer group and by implementing Freshdesk, the SLAs were ensured to be met. Moreover, the company collected feedback and measure the level of service from customers through surveys. Agents and leaders could edit, change, and add questions to the survey according to the data acquired. Results from these surveys allowed the company to monitor the quality of every support request, and also coordinate if needed. The plan for the future of Cloudia is to continue to explore and implement more features of Freshdesk in order to utilize it for all aspects of digital customer service.

3.5 Some drawbacks of Freshdesk

Regardless of the benefits of adopting Freshdesk, there remain some inconveniences that cause businesses hesitation. There aren't many studies about the challenges that Freshdesk might bring. However, users have indicated in reviewing websites that few minor concerns about this software. First of all, some features, such as dashboards and analytics, are only available in the premium plans. The price of these packages can be considered high for companies to pay (Marcialis, 2020). Secondly, there are reviews mentioning substandard reports and dashboards. Ashakir Akbar, SAP Program Manager of Axium Packaging, left a comment about the default reporting templates that Freshdesk offers the company is irrelevant and unusable (Akbar, 2021). A lot of suggestions that the Analytics features can be upgraded. Like Hesham Fouad, Quality and Technical Support Manager at Dsquares, stated "the reporting, analysis modules and insights capabilities for this solution could be improved." (Fouad, 2022). Thirdly, compared to other ticketing software, Freshdesk has all the fundamental functions and features. Nevertheless, they are not unique and

innovative enough that can mark the brand stand-out in the market. Finally, there are limitations and restrictions on a few functions in Freshdesk. The author will present examples based on her experience while working with Freshdesk in the next paragraph.

Company X, where the author worked, is the subsidiary of United Parcel Service (UPS), responsible for medical shipments. The author was in the Customer Service department which is specialized in handling customer queries regarding monitoring and tracking UPS shipments' statuses in Europe. The main communication with customers is email. By July 2021, the company decided to switch from Outlook to Freshdesk, from a traditional web app to a modern helpdesk. However, the implementation was canceled after one month due to essential functions lacking in Freshdesk. Despite Freshdesk being proven to be very beneficial by the management team in the testing phase, agents still found it difficult to adapt to new software due to the operating system of the department. In the recall, the main problem was Rule Settings. The author's team had around 30 customer groups that were divided into each agent, 2500 shipments to track and an average of 20-30 received requests per day. Each customer group was defined by a six-digit/letter code and this code was included in the tracking number of the shipments so agents would know to whom the shipments belonged. For example (please note that this is not a real example), the customer group named Labty had the code 4R5E37, and their parcel number in the UPS system would have started by 1Z**4R5E37**xxxxxxxxxx. With Outlook, agents set rules for each customer group. The incoming email containing the code would be automatically selected to the defined email folder, and agents just needed to work on the folders of their responsible customers. Nonetheless, it is not possible to make this kind of setup with Freshdesk. Additionally, there were other minor issues, such as only one recipient can be filled in the "Sent to" field, or there was no auto-filled recipient like in Outlook and therefore, agents had to type the whole email address of each recipient. These disadvantages of Freshdesk caused frustration and time-wasted to the team since as usual, they sent to around ten or more recipients per email. The author's department has worked with Freshworks to get these issues adjusted and customized so that Freshdesk will be available again.

In general, the disadvantages listed above are subjectively evaluated. The software can be considered a great fit with one company and causes some minor obstacles for another, depending on the operations and requirements of each organization.

4 Methodology

This chapter presents the research method. There is an overview of the method and the reason why it is selected. The author will convey what is included in the research, how the research is carried out, and how the data is retrieved and analyzed. The results of the experimental test are summarized and presented.

4.1 Research method

In the journal of Oberiri D. Apuke in 2017, the research definition was described by Kothari (2004) as "a scientific and systematic search for pertinent information on a specific topic" (p. 40). The research method aims to provide comprehensive answers to the research questions. It defines the scope and approaches and supports the collection of data. It is very important to select the most suitable research method. The well-chosen method allows the researcher to gather essential information for analyzing and reaching the goal of the research.

The thesis research is conducted in the form of a comparative study. According to Lau and Kuziemsky (2017), comparative research is the study of an object in relation to another, "where events such as the use and effect of [...] system can be defined, measured, and compared [...] to prove or disprove a hypothesis" (chapter 10.1). Additionally, comparative research "attempts to reach conclusions beyond single cases and explains differences and similarities between objects of analysis" (Esser & Vliegenthart, 2017, p. 2). The main goal of this paper is to prove that Freshdesk software with a ticketing system can help to improve the service agent's activities in DCS. By highlighting the significant differences between the ticketing software and other common digital channels, the author can confirm the idea that Freshdesk has more advantageous edges.

In this thesis, the method to be used is an experimental test. It refers to the idea of Comparative Usability Testing. In the blog by Poll the People (2022), the comparative usability test is the test to compare the usability of two or more products or systems based on user's experiences, and from that, the strengths and weaknesses are identified. The aim of the test is to select which system is more user-friendly and brings more benefits to the users. One way of conducting the test is to design multiple tasks on both systems for the participant to test. A task list of each scenario should be prepared to be easily followed (n.d.) The author insists on conducting the test because she

wants to provide readers with the most authentic and exciting review experience using Freshdesk. It would be a new approach to convey the favored benefits of Freshdesk and the ticketing system in improving digital customer service. The experimental test is carried out by the author.

The thesis research utilizes both quantitative data and qualitative data from the experimental test to draw discussions and conclusions. Quantitative data is the data that can be measured, and "can be analyzed numerically, the results of which are typically presented using statistics, tables and graphs" (ACAPS, 2012, p. 4). The quantitative results are clear and can be easily read. On the opposite, qualitative data cannot be measured. It comes from interviews, documents, observations, and audiovisual materials (Elkatawneh, 2016, p. 2). The qualitative data presents the experiences, attitudes, beliefs, and thoughts of people (Tran, 2014, p. 10). The researcher has to analyze the qualitative data carefully to withdraw the results.

4.2 Experimental test design

When designing the test, it is important to make sure the data collected from it will provide answers to the research questions. The outcomes should convey efficient insights which can be drawn to conclusions. The test carries on the perceptions about Freshdesk in the previous chapter as foundations for construction. The unnecessary steps may cause meaningless effort and worse, wrongful claims. Thus, the author should carefully consider the content of the experimental test. In the basic, the experimental test is the trial and comparison between the traditional communication method – Outlook, and the helpdesk ticketing system – Freshdesk.

The reason for choosing Outlook as the main object to compare with Freshdesk is despite the rise of different communication channels in the market, email has strongly remained its popularity for years. Hanna et al (2015) believed that emails have proven to be not only the most effective digital channel but also remained the most "pervasive communication tool" (p. 1-4). Countless businesses and companies use Outlook as their main communication channel internally and externally nowadays. Email is a cheap and convenient method of delivering customer service, easy to maintain and manage, and can transfer private and secured information. Customers would likely receive clearer, more detailed, well-written support via email. In sum, the author selects the most common traditional method to set off the differences and influences that the Freshdesk ticketing system can enhance the activities of service agents.

The experimental test is the simulated situation about a fictitious logistics forwarder company - Company Y, in which the author plays the role of a customer service representative/agent. The test is divided into five different sub-trial scenarios. The author builds the scenarios to illustrate the common situations that the agents who work for a logistics company usually encounter. The basic layout of the experimental test is shown in Figure 4. For each scenario, there is a different customer query coming from a different digital channel. The scenarios are designed in reference to the theoretical part so that the most outstanding features of the ticketing system and Freshdesk will be mentioned accordingly. The author will use Outlook and Freshdesk to work on the queries, then record the results. the content of the experimental test should be kept simple and clear, so the readers would easily follow and understand the visible message as well as the results of each and every scenario.

Scenario	Digital Channel	Form	Problem	Request
1	LINE	A message	An issue with the delivery document	Request to correct the invoice
2	Youtube	A question in the comment	Price reference	Request to acknowledge the price of sending herbal medicine overseas
3	Facebook	A comment	A reclamation for shipment damage	Request for compensation
4	Twitter	A tweet	A negative feedback for delayed shipment	None
5	Outlook	An email	A request for customer data	Request to know timesheet summary

Figure 4. Sub-trial scenarios

4.3 Implementation

In the implementation, 2 stages need to be completed: the preparation and the process. In the preparation phase, the author sets up the accounts for all the digital channels involved. She also sets rules and categories for incoming emails/tickets, and redefined templates/canned responses for both Outlook and Freshdesk in each scenario. In the process phase, the experimental test is described step by step.

4.3.1 Preparations

Firstly, the author created two new Google accounts, one for Outlook (#1) and another one for Freshdesk (#2). For Outlook, the author chooses the Free email and calendar package and logs in with the account #1. For Freshdesk, the author chooses the Enterprise Omnichannel package with 21 days free trial. She uses the account #2 to log in to Freshdesk. After that, she creates two

Facebook, two Twitter, two YouTube, and two LINE accounts by using Google accounts #1 and #2. These accounts will be used in the scenarios.

Secondly, the author starts the preparation for each sub-trial scenario as in Table 1.

Scenario	Freshdesk	Outlook
1	• Connect LINE to Freshdesk • Add another agent	• No preparation is needed
2	• Set up the knowledge base + Excel file of Pricings • Set up a canned response • Connect YouTube to Freshdesk	• Set up a defined template
3	• Set up a canned response • Connect Facebook to Freshdesk	• Set up a defined template
4	• Set up a canned response • Connect Twitter to Freshdesk	• Set up a defined template
5	• Set billable time tracking for old tickets	• Set time blocks for tasks in the calendar

Table 1. Preparation for Outlook and Freshdesk

4.3.2 Processes

In Table 2, the processes of how the author conducts each sub-trial scenario are described in detail.

Scenario	Freshdesk	Outlook
1	1. Message received in Freshdesk's chat box 2. Response to customer 3. Log the conversation as a ticket 4. Contact a coworker by Team Huddle and ask if she is responsible for this customer 5. Assign the ticket to her	1. Message received in LINE 2. Response to customer 3. Contact coworker by IM (Instant Message) and ask if she is responsible for this customer 4. Send her the information about the customer's request and ask her to take care of this matter

2	1. Comment received as a ticket 2. Check the Suggested Solutions 3. Calculate the price 4. Go back to Freshdesk, open canned response, and add information to it 5. Send the information to the customer	1. Comment received on YouTube 2. Open OneDrive to check the shared file 3. Calculate the price 4. Go back to Outlook, select the defined template, and add information to it 5. Copy the template and paste it into the comment reply on YouTube
3	1. Comment received as a ticket 2. Answer by using the canned response	1. Comment received in Facebook's post 2. Go to Outlook and select a defined template 3. Copy the template, and paste it into the comment section under the post
4	1. Tweet received as a ticket 2. Response to the ticket using a canned response 3. Send a discount offer using a defined template to the customer's email address 4. Merge the 2 tickets	1. Tweet received on Twitter 2. Go to Outlook and select a defined template (short text) 3. Copy the template, and paste it into the tweet reply on Twitter 4. Go back to Outlook and send a discount offer using a defined template to the customer's email address
5	1. Email received as a ticket 2. Go to the Analytics tab and select the Time Sheet Report and export it 3. Save the report and send it as an attachment when responding to the customer	1. Email received 2. Go to My Calendar and look for the marked tasks 3. Count 4. Reply to the customer with information

Table 2. Steps to conduct the experimental test

4.4 Data collection and analysis

The author conducts the sub-trial scenarios part by part. There are ten short screening records in total, 2-3 minutes each. The author uses the Flashback Express app (version 6.9.0.378) to record the screen while implementing the test on her personal laptop. The screening records then will be edited by the VSDC Free Video Editor app (version 7.1.12.430) and combined into five videos according to five scenarios. Thereby, the readers can see the comparison records side by side with a timer to keep track of time. The comparing videos are in AVI Video files (VLC) (.avi) and included as attachments in Appendix 1.

The experimental test generates both quantitative data and qualitative data. The author will present the results and discuss the collected data.

The quantitative data is collected under the timing measurement form. Using an Excel table, the author will measure the time spent per query/ticket for Outlook and Freshdesk in every sub-trial scenario. The results will be collected, calculated, presented, and compared as:

- The measured time spent on one query in Outlook and one ticket in Freshdesk
- The total time spent on five sub-trial scenarios for each system
- The average time spent on one query in Outlook and one ticket in Freshdesk

The amount of time an agent spends in customer support is one of the most important metrics used in measuring the productivity and efficiency of the service agents. Realistically, handling time does not completely define the agent's performance as different factors affect the time, for instance, the agent needs to spend more time on a complex case or important customer. However, the management team usually sees the shorter the time spent, the more benefits the company has, especially in time and cost reduction. It allows the company to cut costs and resources in customer service, and agents to have time for more important tasks (Srikanth, 2022.) The reason that the author chooses time as data for analysis is that she wants to convey the convenience of using features that helps to enhance and fasten the activities of the agent.

The qualitative data is gathered during the implementation of the experimental test by observations and interactions with the two systems. In the research of Jim Ross (2017) about qualitative comparative usability testing, qualitative such as user comments and opinions can be compared to conclude which system is visibly better. He also believed that more valuable feedback will be given if the user can experience both systems during testing, "seeing two or more ways of doing the same tasks makes it much easier for participants to contrast and discuss the differences between each design solution" (ibid., pp. 1-2.), and from that, the better understanding of which elements making differences can be achieved. In this research analysis, the ideas of each scenario will be explained, as well as every stage and activity during each scenario will be mentioned. The differences between the two software will be put into tables for better comparison. The author analyses the methods and functions used in each case to deduce

how Freshdesk can support improving the agent's productivity and efficiency. The test's results will be discussed and reflected on the scenarios to withdraw insights for the conclusions.

4.5 The justification, limitation, and reliability of the research method

After having considered other research methods, the author found that the experimental testing method is the greatest fit to support solving the topic's questions. The author is unable to carry out a survey or interviews because there is no target segment that the survey can be distributed. To be more specific, there is no real-life Freshdesk user in the author's social circle or professional circle that can exploit data. Therefore, other research methods are inapplicable in this thesis.

The experimental trial test to be conducted is NOT a comparative usability testing, but just applies the idea of testing design. The first reason is the difference in the main purpose. For comparative usability testing, the results are collected to gain insights into the product's development. However, in the experimental test, the author only wants to show the advantage edges of one product over another. The second reason is the difference in the number of participants. While comparative usability testing requires 5-10 participants, the author conducts the experimental test by herself (Six & Macified, 2016, p. 1-3).

The experimental test was designed and implemented subjectively. Due to the fact that the author designs the experimental trial test and conducts it on her own, the results can be evaluated as subjective, personal, and precarious. They may be a little vary depending on the different person who performs the test. Therefore, they are not the optimal data. Additionally, in reality, it depends on companies, teams, and their operational culture to handle the same request (e.g., Scenario 1 – Issue with delivery invoice), meaning there are different steps to follow than those described above. Additionally, the outcomes can be varying if there is any unexpected issue or obstacle during the process. Therefore, in this research work, the experiment test's results can only be validated under conditions that strictly follow the instructions present in section 4.3. In another word, the data collected in this research and to be analyzed resulted from and only from "the ideal situations" that the author sketched.

Nevertheless, it is important to ensure the validity and reliability of the research to make the thesis dependable. The thesis is considered reliable is the one that has clear objectives, well-

prepared approaching plans, precise measurements, and accurate results that should give answers to the research problems (Nikkarinen, 2022, p. 42.) The author ensures all the requirements are well-covered. Another essential thing is that "the results should be the same if the research was repeated" (ibid.). If the experimental trial test is conducted again, the results would not change because the specific steps in each scenario have to be followed, leading to no variation in time recorded.

5 Research findings and reflections

In this chapter, the author presents the experimental test results under two different data forms. The quantitative data shows the time spent on the scenarios, while the qualitative data highlights the advantages of Freshdesk and the ticketing system over Outlook during the implementation of these scenarios. In the end, the overall results will be concretely summarized.

5.1 Quantitative data

The time results of the experimental trial test are presented in Figure 5. The data is shown under the measurement of time and the measuring unit is second. The author notes the time spent for each scenario in an Excel sheet and then calculates the total and average time for Outlook and Freshdesk.

	Time (s)	
	Outlook	**Freshdesk**
Scenario 1 - LINE: Issue with the invoice	245	191
Scenario 2 - YouTube: Price quotation	170	130
Scenario 3 - Facebook: Damaged shipment	57	25
Scenario 4 - Twitter: Delayed shipment	108	108
Scenario 5 - Email: Time tracking	151	177
In total	**731**	**631**
Average	**146.2**	**126.2**

Table 3. Time results of the experimental test

As shown in Chart 1, the time spent on each case varied from less than 30 seconds to more than 4 minutes. The author spends the most time on scenarios 1 and 5, and the least time on scenario 3. In three scenarios (1,2,3), using Freshdesk to carry out the tasks takes less time than using

Outlook. Meanwhiles, in scenario 4 the time spent is equal and in scenario 5, the Outlook's time is shorter than Freshdesk's.
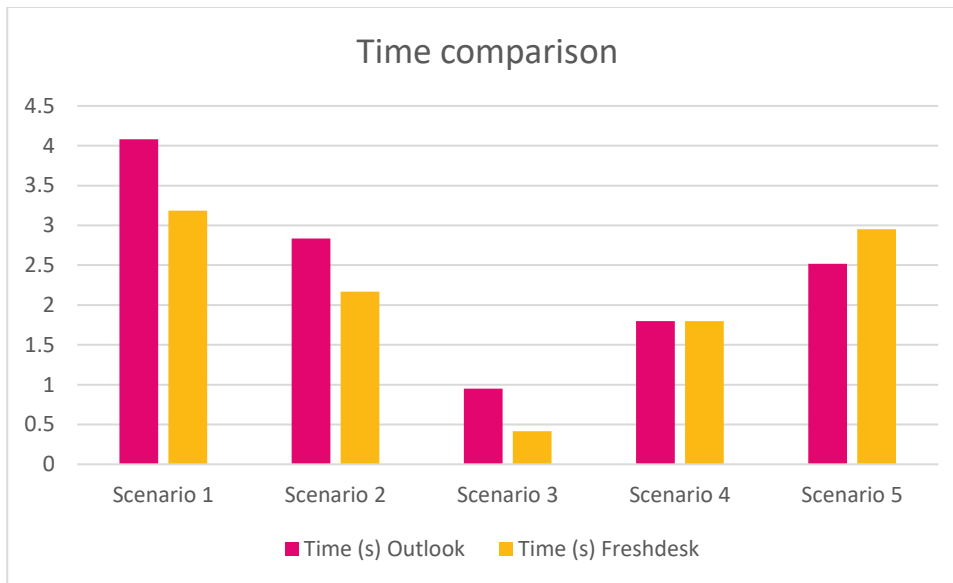
Chart 1. Time comparison

In total, the time the author spent testing for Outlook is 12 minutes 11 seconds, and for Freshdesk is 10 minutes 31 seconds. Owing to that, it is proven that the agent is able to save 1 minute and 40 seconds if she uses Freshdesk instead of Outlook to handle these tasks. On average, the time spent per scenario is 2,44 minutes and 2,10 minutes for Outlook and Freshdesk respectively. In sum, Freshdesk shows a better advantage in time scale, even though there is no significant variance in the time spent between the two software.

5.2 Qualitative data

5.2.1 Scenario 1 - LINE: Issue with the invoice

In scenario 1, the author chooses LINE as the first digital channel to receive a query from a customer. There is an error in the invoice and the customer wants it to be fixed soon because the parcel is being held in customs. In this case, the solution for an agent is to forward the query to the colleague in charge of preparing the paperwork for this parcel. To contact and pass the query on to a coworker, the agent uses Team Huddle in Freshdesk and Instant Message (directly connected with Teams Chat) in Outlook.

Stages	Freshdesk	Outlook
1. Message received	The message is received instantly in Freshdesk's window → don't need to switch channels	Have to switch from channel to channel → inconvenient for an agent to keep checking on different channels
	There is a notification for the new message → cannot miss the message	If don't notice → the message can be missed or delayed in response
	Easily log the conversation into the ticket	-
2. Contact coworker	Easy to open Team Discussion (Huddle)	Take a little bit of time to open the first Teams
	The Discussion can be open in any ticket → the coworker can read the ticket's content	No connection between channels → Have to explain the whole situation to the coworker
	Team Huddle allows to invite more coworkers to collaborate on the ticket and the discussion is attached to the ticket → people who are invited can see the whole conversation history	Cannot invite more people to join in the chat, unless it was formed as a group chat initially → more effort and time spent on getting to know the matter for new coworkers
	Can only chat and share files via Team Huddle	Teams has more functions: call, video call, screen sharing, check activities, etc.
3. Assign the task to a coworker	Assign the ticket to a coworker → transfer the ownership and responsibility to the coworker	Assign the task only via texts in Teams
	Can set high priority → there are automatically reminders, so the coworker won't forget to work on the issue and respond to the customer	-

	Can keep track of the ticket and remind coworker if needed	Have to contact the coworker to have updates on the query

Table 4. Differences between Freshdesk and Outlook – Scenario 1

Freshdesk shows more advantages in this scenario not only in time (nearly a minute shorter) but also in efficiency. In stage 1, with the support of an omnichannel, all the new incoming notifications, messages, calls, and emails are gathered into the Freshdesk window. The agent does not need to open multiple channels on their desktop and keep checking on them like using discrete channels. It is almost impossible to skip any new incoming query in Freshdesk. The agents can easily convert any communication that needs support into a ticket for tracking and handling the matter until it got resolved. Freshdesk creates a better environment for collaboration as shown in stage 2. It is simple to open the discussion or take notes so s that all the agents involved can join. Therefore, the agents would have the whole information about the query, decreasing the risk of miscommunications or misunderstandings. Task assignment is another advantage of Freshdesk in stage 3. The tickets can be assigned to different agent, meaning it is always visible who is responsible for what query. Additionally, the characteristics of the tickets can be set or adjusted by categories, including priority. The automatic reminders for high-priority tickets are constant, urging the agents to pay attention and resolve the issue on time. The only minus is the Team Huddle does not have many functions like Teams. Summarily, in scenario 1, with the help of ticketing, omnichannel, and collaborating functions, it is more convenient to work with Freshdesk. Not only the process is easier and quicker, but the efficiency remains beyond until resolution compared to Outlook, meaning that the agent can ensure the concern of the customer is received in time, worked on, and followed up ever after it is assigned to different agent.

5.2.2 Scenario 2 - YouTube: Price quotation

In scenario 2, the chosen digital channel is YouTube. Under the commercial video that the company released, one customer put a comment asking about the price of herbal medicine shipping. Since it is an uncommon shipping product, the agent needs to look for the information. In Freshdesk, there is a tool called Suggested Solutions where all the data is stored. Similarly, the knowledge is shared via OneDrive in Outlook. Once the agent has the information, she uses the defined response to answer the customer.

Stages	Freshdesk	Outlook
1. Comment received	Notification shown in Freshdesk → don't need to switch channels and cannot miss any query	Notification shown in the digital channel → have to keep checking on every channel from time to time and the message can be missed or delayed in response
	All the comments after being automatically filtered are converted into tickets → only necessary comments that require support will be transferred to agents	All the comments can be filtered manually → the agents need to filter themselves and read through to pick out what comments that require support
2. Finding information	All the information and knowledge base are gathered in one place and shared with all agents	The information and files can be shared with agents manually
3. Answer the customer	When replying to the ticket, the answer appears as a reply to the comment on YouTube → more convenient and time-saving	Have to copy and paste the template under the comment in YouTube → less convenient and time-saving
	The query exists as a ticket → the information is saved in the system	No digital connection between Outlook and YouTube → the query can be lost over time if not being noted

Table 5. Differences between Freshdesk and Outlook – Scenario 2

The benefits of omnichannel are as discussed in scenario 1. Additionally, agents can set up key words detects in order to filter out the non-support required comments in Freshdesk. Therefore, only comments that require service support will be automatically converted into tickets and appear in Freshdesk's window. Agents don't need to keep checking on different digital channels and worry that there might be a missed query. They also don't need to spend time manually skimming and filtering through all the comments. In stage 2, the Suggested Solutions tool is similar to OneDrive, where all the information is shared with agents. One minor benefit of Freshdesk is that any ticket and communication can be converted as a suggested solution, while in Outlook, any email or conversation should be manually saved as files first, then shared with groups. In stage

3, it is much more convenient to receive and reply to the comment in Freshdesk's window than to copy and paste the canned response to the reply under the comment on YouTube. Again, having the query under the ticketing form helps the tracking process. Not only the query's content is saved, but also the customer 's contact details. This information is necessary data for the analysis of current trends. Moreover, in this case, the agent can follow up the case by sending a reminder to the customer if there is no new shipment has been booked yet. Overall, the long-term benefits of Freshdesk are undeniable for agent activities.

5.2.3 Scenario 3 - Facebook: Damaged shipment

Scenario 3 targets one of the most popular social media – Facebook (Statista, 2022) as the digital channel. In scenario 3, the customer received the damaged parcel. He wrote a complaint in form of a comment under the Facebook post. Having the same concept with scenario 2, in this case, we simply use a canned response to reply to the customer, suggesting which steps to follow to get the compensation.

Stages	Freshdesk	Outlook
1. Comment received	Notification shown in Freshdesk → don't need to switch channels and cannot miss any query	Notification shown in the digital channel → have to keep checking on every channel from time to time and the message can be missed or delayed in response
	All the comments after being automatically filtered are converted into tickets → only necessary comments that require support will be transferred to agents	All the comments can be filtered manually → the agents need to filter themselves and read through to pick out what comments that require support
2. Answer the customer	When replying to the ticket, the answer appears as a reply to the comment on Facebook → more convenient and time-saving	Have to copy and paste the template under the comment in Facebook → less convenient and time-saving
	The query exists as a ticket → the information is saved in the system	No digital connection between Outlook and Facebook → the query

		can be lost over time if not being noted

Table 6. Differences between Freshdesk and Outlook – Scenario 3

The differences between Freshdesk and Outlook are the same in scenario 2. Therefore, the author will discuss the impact of ticketing system in this query. Transport damage is not the most common service failure in transporting logistics, but once happened, it causes a huge impact on all parties involved (Sarder, 2021, p. 197–217). In scenario 3, the issue has not been solved only by sending link and instructions how to claim compensation. The case needs to be followed up, and well as the agent should inform the customer the updates on the claiming processes, as the make-up efforts to ease the frustration of a bad service experience. With the ticketing system, the case would be saved, pursued, and resolved. It also can be shared with other departments. Feedback can be used as data to identify the bottlenecks which need to be improved. It is possible with Outlook too, however, it is more manual inconvenience steps to save, share, follow up, and solve the case, especially if the agent has to work with dicreated channels. Another point worth mentioning is that the time the agent received the notification is different: Outlook 15 seconds and Freshdesk 6 seconds, leading to the time spent on the query in Outlook being longer. To sum up, in the longterm, applying Freshdesk and the ticketing system would be more advantageous to handle such queries.

5.2.4 Scenario 4 - Twitter: Delayed shipment

Another popular social media is selected for scenario 4 – Twitter. The customer posted a negative tweet and tagged the company name on Twitter. Withrow wrote on her marketing blog that "Critical comments on social media do matter for your brand, and if you choose to ignore them, it will affect more than your image" (2021), meaning that not only your brand and revenue would be damage, but the company can lose both existing and potential customers, as news in social media spreads like a hurricane and people believe in online reviews and feedbacks. For that reason, in this case, an apology is not enough, but also little effort of compensation. Firstly, the agent replies to the tweet and apology for the failing service. Then she sends an email with a discount offer for the next booking, encouraging customers to continue using the service.

Stages	Freshdesk	Outlook
1. Tweet received	Notification shown in Freshdesk → don't need to switch channels and cannot miss any query	Notification shown in the digital channel → have to keep checking on every channel from time to time and the message can be missed or delayed in response
	All the tweets that tag the company name are converted into tickets	-
2. Reply to the tweet	When replying to the ticket, the answer appears as a reply to the tweet on Twitter → more convenient and time-saving	Have to copy and paste the template under the tweet in Twitter → less convenient and time-saving
	The query exists as a ticket → the information is saved in the system	No digital connection between Outlook and Twitter → the query can be lost over time if not being noted
3. Send an email	The defined template can automatically fill the content and subject line of the email, as well as the categories	The defined template can automatically fill the content of the email
4. Connect the case with the email	Merging tickets → better track and trace	-

Table 7. Differences between Freshdesk and Outlook – Scenario 4

There is no significant variance in stages 1 and 2 compared with the above scenarios. Through, the defined templates and merging tickets in stages 3 and 4 make the gap in Freshdesk and Outlook's performance. The defined templates of Freshdesk automatically fill in more sections of an email than Outlook's, allowing agents to save some time and easily filter the ticket as the categories have already been defined. The merging ticket in stage 4 is a great tool to reduce the complexity and improve traceability. In this scenario, there are two tickets generated, one is the tweet on

Twitter, another is the email sent to the customer. It is confusing when searching for the query. With the merging function, the agents can define which is the original ticket (primary) and merge other tickets that are related into a chain. By that, no information is missed, and the service provided would be more coherent. When discussing in relation to the time, the notification about the new tweet converted into a ticket in Freshdesk is 14 seconds, while it took 20 seconds to appear directly on Twitter. Another point is that there is an additional merging step in Freshdesk which is not performed with Outlook. Accordingly, even though the time spent on this scenario is the same, Freshdesk still presents higher advantages over Outlook.

5.2.5 Scenario 5 - Email: Time tracking

The fifth chosen channel is email, which is expected to be Outlook's main function. In this scenario, the agent worked with the customer on one project. Now the customer wants to know the time the agent spent on the project to calculate the payment. For Outlook, the agent blocked the time in the calendars to mark the time spent on the customer project. The agent counts the time manually and answers the email. For Freshdesk, there is a time-recording function. Whenever the agent was working on the customer project, she pressed the record button and chose billable selection, meaning the time count is for billing. The agent will export a timesheet report, download it, and send it to the customer.

Stages	Freshdesk	Outlook
1. Email received	Email received under ticketing form in Freshdesk	Email received in Outlook
2. Time counting	Use Analytics and select the timesheet report	Use my Calendars
	Adjust the information and export the report	Manually count the time by checking every calendar day
	Wait for the report to be received, then download it to pc	-

| 3. Reply email | - | Have auto-filling → helps to finish the sentence without typing |
| | Have to attach the report in the responding email | Simply add the time count to the email |

Table 8. Differences between Freshdesk and Outlook – Scenario 5

Scenario 5 is the only case that the time spent in Outlook is shorter than in Freshdesk. The processes are much simpler, and the auto-filling in Outlook helps the agent to shorten the time spent on this query. Nevertheless, in the bigger picture, the reports generated by Freshdesk have more advantages. In the beginning, to set up the time blocks in Outlook, the agent has to go through many steps in my Calendars, while in Freshdesk, she can simply set a record by a button next to any ticket, and stop whenever she finishes. By doing so, the time spent is recorded more accurately to minutes, not just assuming and rounding up numbers. In the author's opinion, the report contains all the details that are relevant and legitimate. Not only it shows the exact time spent on each ticket/case, but also all the information about the tickets like the priority, status, group, etc. In general, sending a timesheet report is more professional than simply implying the number of hours spent, because the data is recorded and reported transparently.

5.3 Summarized findings

It is visible that Freshdesk with the ticketing system demonstrates more outstanding advantages when compared with the common communicational channel Outlook. The total and average time spent on five scenarios for Freshdesk is shorter than Outlook. Moreover, Freshdesk has functions that not only provide the convenience to enhance the agent's productivity, but also ensure the long-term benefits for tracking, handling, and analyzing information. The ticketing system plays the role as the main undeniable advantage that keeps the queries in order and transparent workload. Along with that, other features such as omnichannel, collaboration, automation, and analytics also contribute to the performance of Freshdesk. Both systems have friendly interfaces, but Freshdesk has more tools and functions to deploy. Generally, throughout the experimental test, Freshdesk does reveal greater and deeper support for the customer service representative's activities.

6 Conclusions

In this chapter, the conclusions are drawn from the theoretical reviews combined with the results of the research, in order to provide the proper answers to the research questions. The author discusses whether the aim of the thesis has been reached. In the end, a few open points related to the topic will be reflected.

6.1 The outcomes of the thesis

The purpose of the thesis work is to study the positive effects of Freshdesk with the ticketing system on the service agent's activities in DCS. There are two research problems mentioned at the beginning of the article that need to be answered in this thesis.

The first problem is how the ticketing system is used in digital customer service. A good digital customer system is expected to enhance the agent's performance, such as reducing the non-added value activities, improving productivity, better handling the customer's queries, advancing information, etc., by offered features. The ticketing system is able to provide companies and agents with these expectations. The DCS's operations performed by agents are seamless and transparent. Data and support-needed requests are gathered into one interface with instant notifications, automatically categorized for distribution, and saved in the system, allowing agents to have a full view of customer information and deliver consistent supporting service (NTT Data, n.d., p. 4). The customer query under the form of a ticket is easy for tracking, tracing, and sharing. It is also good for agents to issue their capacity based on the priority and complexity of the queries. In the experimental test, the contribution of the ticketing system from Freshdesk is as described in theory. All the queries are collected from different digital channels and converted into tickets for agents to keep track of and handle them (omnichannel). There is no time waste monitoring channels from time to time and handling queries manually. Tickets and customer information are recorded for ongoing and resolved tickets so any agent who has the authority can access and work with the data. In all, the ticketing system provides agents with a better-organized interface to control digital customer service in a deeper and long-term dimension.

The second problem is how Freshdesk helps agents to improve the DCS. In the theory part, the author listed the beneficial features of Freshdesk, the customer support software, can bring to

service agents. These features combined with the ticketing system support the daily activities of agents, making them simpler and more efficient. The advantages of Freshdesk's features are also explicitly mentioned in the case company examples, helping to improve their customer service. Besides omnichannel, the three features that are leveraged by these companies are automation, collaboration, and analytics. During the implementation of five scenarios, the author has proved that the features make a great contribution to supporting agents with their tasks. Agents put in less effort but get the same results in a shorter time in comparison with using non-ticketing software. Freshdesk software is designed to ensure that every step conducted by an agent is value-added. In sum, the tools and functions from Freshdesk allow agents to manage the DCS comprehensively with higher speed.

Generally, in the current dynamic environment, in order to meet customers' expectations and keep up with the market, digitalizing customer service is a must-do for any company. Having good DCS means the companies not only make customers satisfied but also can approach new opportunities. For this purpose, the ticketing system appears as a solution for advancing the DCS. Ticketing software like Freshdesk provides countless benefits to improve the procedures of customer care and enable agents to utilize their capacities at their rates to support customers. After all, strengthening the relationship with customers is important for any business, but to make it happens, the internal operations which carried out by customer service representatives must also be taken care of and firmly reinforced.

6.2 The significance of the study

With the importance of DCS widely recognized, various suggestions for improvements are presented. Along with others, the ticketing system is considered as a potential approach to improve DCS. Originally, the ticketing system is most commonly used in IT services as a tool to handle technical problem requests. In recent days, companies begin to notice the concept of a ticketing system can also be well-applied to general customer support. Many organizations adopted helpdesk software using a ticketing system to handle their DCS and gained numerous benefits. Nevertheless, there is a limited number of research about the ticketing system in DCS. On another hand, Freshdesk is one of the most popular ticketing software in the market, and yet, the academic study about it and its effects has remained confined. Therefore, this thesis makes efforts to provide more knowledge about ticketing system and Freshdesk in relation to the DCS.

The difference between this study from others is that it was not built from any specific company case. Because of that, the reviews are general, and readers can imply them from more divergent views. The thesis shows the implications and advantages that companies can obtain by applying ticketing helpdesk. Moreover, it highlights the aspects that differentiate the tool compared to a single-channel tool or common communication methods. The author dedicates this study to delivering a suggested solution to organizations who are looking for improving their DCS. The mentioned knowledge and experience can be seen as valuable to refer to in the decision-making phase to define the objectives and future plans of the DCS. Since the thesis is conducted from the agent's perspective, the management team can understand more the role of the agent's performance, which directly results in service quality given to customers. Leading from that, more attention shall be paid, as well as operating methods, to exploit the potential capability of the agents. The author wants to encourage companies to make changes if necessary as they are opportunities to improve not only the customer experience but also the employee experience, the two main factors of any company's success.

6.3 Open points to discuss

Throughout the thesis, it is undoubtful that Freshdesk has pros and cons. The disadvantages of Freshdesk were brought up both in theory and research parts. Nonetheless, they are visibly minor drawbacks that do not cause any disruption in operation. It is also noticeable that only the company's side is dealing with the disadvantages of Freshdesk. It causes no effect on customers as they don't have problems sending inquiries via digital channels. Further, even though Freshdesk is not considered more innovative than its alternatives, its price range is more affordable, attracting businesses to choose. At last, Freshdesk was built to serve companies across industries. For that reason, it may be unfeasible to expect to have all functions that fit every business completely. If there is any limitation or wanted-to-add feature, it is recommended to discuss and collaborate with Freskworks to come up with solutions. Freshworks is willing to adjust the software according to their customer's needs. Thereby, companies can exploit Freshdesk maximally to support their operations at the highest realm.

On another hand, the author suggested that Freshdesk is more suitable for business purposes than for personal use. There are too many complex steps to set up Freshdesk and connect channels with it. For official digital communication, Outlook presents a decent tool because it perfectly

performs its designed function which is handling communication via email. Every system has its objectives and targeted group of clients. Outlook as well may have more potential like Freshdesk if the users select the paid packages combined with other apps in Microsoft. Therefore, the author did not conclude which system is better, but which system gives more effects in DCS.

The last point to discuss is the agent's customer service skills. It is clearly shown that a high level of customer service is arduous to achieve. In the study about the effects of customer service on customer satisfaction written in 2011, it was remarked that in order to provide outstanding service to customers, consistency though all the levels within the organization shall be retained, besides the skills of the employee expertise is taken into account (Newby & McManus, 2000, as cited in Jahanshahi el at., 2011). Apps or systems are just supporting tools for the agent's activities. They do not determine the quality of the service provided to customers. In fact, the empathy, deep understanding, and commitment to helping customers with their issues appear to create excellent customer service, and those require proper training and years of honing experience.

7 References

AASC. (n.d.). *AASC becomes a Freshworks solution partner in Vietnam*. Retrieved from AASC: https://aasc.com.vn/web/index.php/en/tin-tuc/tin-aasc/item/1040-aasc-becomes-freshworks-solution-partner-in-vietnam

Acaps. (2012). *Qualitative and Quantitative Research Techniques for Humanitarian Needs Assessment.* Acaps. Retrieved 2022, from https://www.orange.ngo/wp-content/uploads/2017/06/Qualitative-and-Quantitative-Research-Techniques.pdf

Acquila-Natale, E., Chaparro-Peláez, J., Carazo, L., & Cuenca-Enrique, C. (2022). Do or Die? The Effects of COVID-19 on Channel Integration and Digital Transformation of Large Clothing and Apparel Retailers in Spain. *Journal of Theoretical and Applied Electronic Commerce Research, 17*(2), 439-457. doi:10.3390/jtaer17020023

Akbar, A. (2021, November 10). *A stable and scalable customer service software with a useful reporting feature*. Retrieved from Freshdesk Reviews: https://www.peerspot.com/products/freshdesk-reviews#review_1337330

Allen, P. (2022, April 19). *Freshworks for Startups: Check out the awesome benefits for the EU-Startups Community!* Retrieved from EU-Startups: https://www.eu-startups.com/2022/04/freshworks-for-startups-check-out-the-awesome-benefits-for-the-eu-startups-community-sponsored/

Apuke, O. D. (2017). Quantitative Research Methods : A Synopsis Approach. *Journal of Business and Management, 6*(11), 40-47. doi:10.12816/0040336

Belevska, T. (2022, January 19). *Ticketing System: A Tool to Enhance Customer Service Operations*. Retrieved from Help Desk Migration / Blog: https://help-desk-migration.com/ticketing-system-in-customer-service/

Bhalla, K. (2021, September 23). *The success story of India's first SaaS company to be listed in Nasdaq*. Retrieved from Business Insider India: https://www.businessinsider.in/tech/enterprise/news/freshworks-ipo-the-success-story-of-indias-first-saas-company-to-be-listed-in-us-stock-exchange/articleshow/86453444.cms

Brame, D. (2019, December 20). *Freshdesk Review*. Retrieved from PC: https://me.pcmag.com/en/smb-accounting/2801/freshdesk-review

Chinunda, E. D. (2011). *Practical Insights on Customer Service: An African Perspective.* London: Adonis & Abbey Publishers Limited. Retrieved 2022

Cybrosys Technologies. (2021, June 19). *Online Ticketing System: A Digital Platform For Customer Support*. Retrieved from Cybrosys Technologies: https://www.cybrosys.com/blog/online-ticketing-system-a-digital-platform-for-customer-support

DeLisi, R., & Michaeli, D. (2021). *Digital Customer Service: Transforming Customer Experience for an On-Screen World.* New York: Wiley. Retrieved 2022

Elkatawneh, H. (2016). Comparing Qualitative and Quantitative Approaches. *SSRN Electronic Journal*, 5. doi:10.2139/ssrn.2742779

Fouad, H. (2022, April 14). *IT ticketing system with a comprehensive training academy on how the solution works*. Retrieved from Freshdesk Reviews: https://www.peerspot.com/products/freshdesk-reviews/page-2#review_2128789

Freshdesk . (n.d.). *Freshdesk Support Desk Pricing*. Retrieved from Freshworks: https://freshdesk.com/pricing

Freshdesk . (n.d.). *It takes a team to deliver great customer support*. Retrieved from Freshworks: https://freshdesk.com/collaboration

Freshdesk. (n.d.). *7-Eleven Philippines resolves 98% tickets within SLAs using scenario automations on Freshdesk*. Retrieved from Freshworks: https://freshdesk.com/resources/case-study/7-eleven

Freshdesk. (n.d.). *Delight your customers with effortless customer service*. Retrieved from Freshworks: https://freshdesk.com/

Freshdesk. (n.d.). *Exceed customer expectations with Freshdesk*. Retrieved from Freshworks: https://freshdesk.com/features

Freshdesk. (n.d.). *ShipTime achieves 96% CSAT with omnichannel customer service powered by Freshdesk*. Retrieved from Freshworks: https://freshdesk.com/resources/case-study/shiptime

Freshworks. (n.d.). *About us*. Retrieved from Freshworks: https://www.freshworks.com/company/about/

Gerson, R. (1992). *Beyond Customer Service: Keeping Customers for Life.* (K. Kepler, Ed.) California: Crisp Publications. Retrieved 2022

Gohil, F., & Kumar, V. (2019). Ticketing System. *International Journal of Trend in Scientific Research and Development, 3*(4), 155-156. doi:10.31142/ijtsrd23603

Hoong, V. (2013). *The digital transformation of customer services: Our point of view.* London: Deloitte. Retrieved 2022, from https://asociaciondec.org/wp-content/uploads/2017/01/deloitte-nl-the-digital-transformation-of-customer-services.pdf

Ikonen, P. (2016). *The deployment of the Freshdesk customer service software in Cloudia.* Joensuu: Karelia University of Applied Sciences. doi:https://urn.fi/URN:NBN:fi:amk-2016101315168

Jahanshahi, A. A., Gashti, M. A., Mirdamadi, S. A., Nawaser, K., & Khaksar, S. M. (2011, May). Study the Effects of Customer Service and Product Quality on Customer. *International Journal of Humanities and Social Science, Vol. 1 No. 7*(The Special Issue on Behavioral and Social Science), 253-260. Retrieved 2022, from https://www.researchgate.net/publication/235791092_Study_of_the_effects_of_custome r_service_and_product_quality_on_customer_satisfaction_and_loyalty

Jois, A., K, R., & Chakrabarti, S. (2019). Freshdesk: bringing in freshness in startup world case. *JOURNAL OF INFORMATION TECHNOLOGY CASE AND APPLICATION RESEARCH, 21*(3-4), 140-150. doi:10.1080/15228053.2020.1718348

Kingstone, S. (2019). *Customer Experience as the Catalyst for Digital Transformation.* New York: 451 Research. Retrieved 2022, from https://www.adobe.com/content/dam/dx/us/en/resources/customer-experience-management/pdfs/customer-experience-as-the-catalyst-for-digital-transformation.pdf

Lau, F., & Holbrook, A. (2017). Chapter 10 Methods for Comparative Studies. In F. Lau, & C. Kuziemsky, *Handbook of eHealth Evaluation: An Evidence-based Approach* (p. 504). Columbia: University of Victoria. Retrieved 2022, from https://www.ncbi.nlm.nih.gov/books/NBK481590/pdf/Bookshelf_NBK481590.pdf

Lewis, B., & Mitchell, V.-W. (1990). Defining and Measuring the Quality of Customer Service. *Marketing Intelligence & Planning, 8*(6), 11-17. doi:10.1108/EUM0000000001086

Macefield, R., & Six, J. (2016). *How to Determine the Right Number of Participants for Usability Studies.* Texas: UX Matters. Retrieved 2022, from https://www.uxmatters.com/mt/archives/2016/01/how-to-determine-the-right-number-of-participants-for-usability-studies.php

Marcialis, J. (2020, October 22). *What is Freshdesk: Features presentation and everything you need to know before to start*. Retrieved from Gorgias: https://www.gorgias.com/blog/what-is-freshdesk#toc-what-is-freshdesk-

Nikkarinen, M. (2022). *Development of Digital Customer Experience in Air Navigation Services.* Helsinki: Haaga-Helia University of Applied Sciences. doi:https://urn.fi/URN:NBN:fi:amk-202205169695

NTT Data. (n.d.). *Guide to customer service in the digital era.* NTT Data Business Solutions. Retrieved 2022, from https://us.nttdata-solutions.com/hubfs/IB-C4HANA/ebook-itelligence-Guide-to-Customer-Service-Digital-Era-1.pdf

Poll the People. (2022, May 18). *Comparative Usability Testing: Why It's Important* . Retrieved from Poll the People: https://pollthepeople.app/comparative-usability-testing/

Rogerson, K. (2021, March 30). *Support Ticket Systems: What is Ticketing and Why Customer Service Suffers Without It* . Retrieved from Comm100: https://www.comm100.com/blog/support-ticket-systems/

Ross, J. (2017). *Conducting Qualitative, Comparative Usability Testing.* Pennsylvania: UX Matters. Retrieved 2022, from https://www.uxmatters.com/mt/archives/2017/03/conducting-qualitative-comparative-usability-testing.php

S., D. (2022, July 26). *Most popular social networks worldwide as of January 2022, ranked by number of monthly active users* . Retrieved from Statista: https://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/

Salesforce. (2022, March). *What Is Customer Service?* Retrieved from Salesforce: https://www.salesforce.com/resources/articles/what-is-customer-service/

Sarder, M. (2021). Logistics customer services. *Public Health Emergency Collection*, 197–217. doi:10.1016/B978-0-12-815974-3.00008-3

Smith, J., Hanna, R., & Swain, S. (2015). *Email Marketing in a Digital World: The Basics and Beyond.* New York: Email Marketing in a Digital World: The Basics and Beyond. Retrieved 2022

Sorsa, J. (2021). *Helpdesk ticketing system for a small -sized company.* Turku: Turku University of Applied Sciences. doi:https://urn.fi/URN:NBN:fi:amk-2021120122861

Srikanth, A. (2022, May 2). *What is Average Handle Time (AHT) + An Easy Way To Calculate It*. Retrieved from Freshworks: https://freshdesk.com/customer-support-software/average-handle-time-blog/

TeamViewer. (2022, January 21). *What is Digital Customer Service*. Retrieved from TeamViewer: https://www.teamviewer.com/en/what-is-digital-customer-service/

Tran, T. (2014). *Case Kauneusstudio FAB: A status analysis of the current digital marketing.* Leppävaara: Laurea University of Applied Sciences. doi:https://urn.fi/URN:NBN:fi:amk-201505045942

Vecchio, L. D. (n.d.). *What Is A Ticketing System? And How It Works*. Retrieved from Planergy: https://planergy.com/blog/what-is-ticketing-system/

Wardley, M. (2019). *Preparing for the Digital Customer Experience: Asking the Right Questions to Turbo-Charge Digital Transformation.* Framingham: IDC. Retrieved 2022, from https://execsintheknow.com/wp-content/uploads/2021/02/idctelusintldigitalcxworkbook1602083357783.pdf

Withrow, C. (2021, July 27). *Do negative comments really matter? Stats and key takeaways for marketers*. Retrieved from Sociality.io: https://sociality.io/blog/social-media-feedback/#0-does-negative-social-media-comments-impact-sales

Y Meadows. (2021, December 28). *Implementing A Ticketing System* . Retrieved from Y Meadows: https://ymeadows.com/en-articles/implementing-a-ticketing-system

Appendices

Appendix 1. Comparing videos of the experimental test

YouTube: https://drive.google.com/file/d/1EmsPAoU48vgEu38BqjiNCaiOfaE-lOYUR/view?usp=sharing

Twitter: https://drive.google.com/file/d/1M_oJJusFJyrfZzAsHo-VvLqMC_L0rGGk/view?usp=sharing

Line: https://drive.google.com/file/d/10w4IGH0Y6eQglA3xEJ0VC_QerZtHbrZZ/view?usp=sharing

Facebook: https://drive.google.com/file/d/12jG2Hx2RK4TSegBS_dRNV6d10qjWiDFZ/view?usp=sharing

Email: https://drive.google.com/file/d/1quB5PiDK1StICvO-X6Z8QZEnx6Jc5fvb/view?usp=sharing

Appendix 2. Uncut records

The below are the uncut screen records of scenario 2 (YouTube) and scenario 3 (Facebook) of Freshdesk. In the comparing videos in Appendix 1, the author cut the records to the exact moment once the task is finished. However, in the uncut versions, the author shows the audiences how the responses should appear in digital channels after being sent in Freshdesk.

YouTube Freshdesk:

https://drive.google.com/file/d/137DCZ8fDqNFdpzLCAHCXFEXJ8dqL9tqn/view?usp=sharing

Facebook Freshdesk: https://drive.google.com/file/d/1jR-0c8dkXnOntiuP3wE1fvafo-8HxVQS/view?usp=sharing