January 26, 2021

Honorable Toni Atkins
Senate President Pro Tempore
State Capitol, Room 205
Sacramento, CA 95814

Honorable Anthony Rendon
Speaker of the Assembly
State Capitol, Room 219
Sacramento, CA 95814

Re: Department of Consumer Affairs: Internal Review of Office of Information Services

Dear Senate President Pro Tempore Atkins and Speaker Rendon:

The Budget Act of 2018 required the Department of Consumer Affairs (Department) to conduct a two-year review of its centralized services and report back to the Legislature.

The enclosed review is the Department’s third response to the Legislature pursuant to Senate Bill 840 (Chapter 29, Statutes of 2018). The Department identified four main areas of centralized services, which were prioritized by the Department’s Pro Rata Work Group, that will be reported to the Legislature: (1) regulations, (2) investigations, (3) information technology support, and (4) human resources (hiring and recruitment). This report is the Department’s review of centralized services for information technology support.

This review is the result of stakeholder outreach, research, and analysis conducted by staff from the Department’s Office of Information Services and Organizational Improvement Office. There are many improvement opportunities in this review that the Department will be implementing in addition to many initiatives the Department has already begun.

I appreciate the opportunity to share this review. I look forward to continued collaboration and welcome feedback on ways in which the Department can improve its service to the 37 boards and bureaus it oversees.
If you have any questions or comments about this review, please contact Jennifer Simoes, Deputy Director of Legislation, at (916) 531-1096 or jennifer.simoes@dca.ca.gov.

Sincerely,

Kimberly Kirchmeyer
Director

cc: (provided electronically)

Senator Richard D. Roth, Chair, Senate Committee on Business, Professions and Economic Development
Senator Anna M. Caballero, Chair, Senate Budget and Fiscal Review Subcommittee No. 4
Assembly Member Evan Low, Chair, Assembly Committee on Business and Professions
Assembly Member Wendy Carrillo, Chair, Assembly Budget Subcommittee No. 4
Stuart Thompson, Chief Deputy Legislative Affairs Secretary, Office of the Governor
Lourdes Castro Ramírez, Secretary, Business, Consumer Services and Housing Agency
Department of Consumer Affairs Executive Officers and Bureau Chiefs

Attachment:
Internal Review of the Office of Information Services
Internal Review of the Office of Information Services – Client IT Support Services

Department of Consumer Affairs

January 26, 2021
Executive Summary

This is the third review in a series that the Department of Consumer Affairs (DCA or Department) will provide to the Legislature. The Budget Act of 2018 required the Department to conduct a process improvement review of the centralized services it provides to the 37 boards, bureaus, committees, and commission (boards) it oversees. Senate Bill 840 (SB 840), by Senator Holly Mitchell (Chapter 29, Statutes of 2018), provides that the Department, in consultation with the Pro Rata Work Group, shall identify and prioritize the most critical services to be reviewed and reported to the Legislature. The Department is required to make the results of the reviews available to the Legislature as they are completed. These reviews will describe existing processes and identify opportunities to achieve efficiencies.

Prior to the central services review mandate, the Office of Information Services (OIS) had already requested a review by DCA’s Organizational Improvement Office (OIO) to improve their services but OIO was unable to assist at that time. The Client IT Support Services (CISS) unit in OIS was selected to be reviewed as it serves as the first point of contact for the DCA Director, DCA executive staff, the boards of DCA, and DCA staff when any IT-related issue occurs. OIO conducted the review from October through December 2019.

The Department analyzed data gathered through standardized and ad hoc system reports, interviews, surveys, and process mapping to identify potential improvement opportunities that could be implemented.

Improvement Opportunity Highlights

OIO conducted two surveys that were sent to DCA and board and bureau staff who had contacted CISS within six months preceding the start of this review and to board and bureau executives. OIO also conducted interviews with CISS staff and management and gathered data from system reports.

Through the surveys, both staff and executives indicated that the quality of service provided by CISS is excellent. Ninety-four staff responded to their survey and 19 executives responded to their survey. In fact, almost 80% of staff and 95% of the executives who took a survey indicated that CISS provided either very high quality or high-quality service. The survey also revealed that both staff and executives are satisfied with the overall timeliness of CISS’ performance and CISS typically meets their needs. However, when researched, areas of improvement centered around communication, quality and timeliness, and training.
This report contains improvement opportunities to assist in streamlining CISS processes. Improvement opportunities detailed in this report include:

1. *Create a comprehensive communication plan that includes methods to disseminate standard language regarding specific IT-related issues, recipients of the communication, frequency of the communication, and an established time frame to send out the communication.*

The surveys revealed that customers want to be informed regarding how long it will take to resolve their issue. They also feel they do not receive frequent enough communication regarding the status of their ticket and do not know when their ticket has been assigned to a technician. Additionally, there are self-help resources available to customers; however, based on customer feedback, many are unaware of these resources or do not know where to find them. OIS has already taken steps, as described below in Improvement Opportunity 1.3 to improve communication and highlight its tools and resources.

2. *Train Level I staff to do the less complex work currently performed by Levels II and III staff. This change will allow higher-level staff to work on more complex work.*

Originally, the Service Desk was a contact center that received requests regarding IT services, created tickets, and routed them to the appropriate service team for resolution. In 2018, the Service Desk merged with Client Device Services, creating the CISS unit that could now resolve a portion of the tickets without routing problems to other areas of OIS. Staff who comprised the original Service Desk were promoted to the same Level I positions as the staff in Client Device Services. It was discovered during staff and management interviews that certain higher-level staff are doing work that could be handled by lower-level staff. If this work were assigned to lower-level staff, the higher-level staff would be freed up to do the more complex work for CISS.

3. *Provide continuous standard training for all staff to balance skill level and efficiency, which will eliminate workflow bottlenecks and improve performance.*

The surveys and interviews revealed that, despite being in the same classification as their peers, not all CISS staff have the same level of expertise; therefore, customers receive inconsistent service depending upon which technician is assigned to their ticket.

4. *Consolidate the @OISSERVICEDESK and @OISTICKET email addresses.*

A DCA customer can submit a ticket requesting IT assistance using the following methods: submit a ticket to the Cherwell Portal (DCA’s Department Service Center, or DSC), a Department-wide browser-based ticket management system, call CISS directly, or send an email to one of two email addresses. Almost half of the tickets created are received by email. There are currently two email addresses: @OISTICKET and
@OISSERVICEDESK. The intent of @OISSERVICEDESK is to allow customers to ask general questions of a technician without necessarily creating a ticket. However, many customers also use this email address to submit tickets. OIO recommends consolidating the @OISSERVICEDESK email with the @OISTICKET email address, which will result in all emailed tickets being automatically entered into the Cherwell Portal, thereby allowing all submissions to be tracked by the system. Currently, an email received at @OISTICKET is automatically created in the system. However, an email received at @OISSERVICEDESK must be manually entered into the system. Because the @OISSERVICEDESK email address is not monitored closely, tickets received at that email address may not be entered into the system in a timely fashion. By consolidating both email addresses, all email submissions will automatically be entered into the system and tracked. OIO also recommends creating a communique over a six-to-12-month period informing DCA clients to submit all questions and tickets to the @OISTICKET email address in an attempt to phase out the @OISSERVICEDESK email address or, preferably, take advantage of fully utilizing the Cherwell Portal.
Department of Consumer Affairs
Overview and Background

The Department issues licenses, certificates, registrations, and permits in over 250 business and professional categories through 37 regulatory entities. These entities set and enforce minimum qualifications for the professions and vocations they regulate, which include nearly all of California’s health care fields.

DCA’s regulatory entities are supported by a staff of legal, technical, and administrative professionals at the Department. These professionals provide legal, human resources, information technology, investigations, professional examinations, training, strategic planning, fiscal management, and other integral support services. DCA is committed to its core mission of consumer protection, which is shared by all its boards. The individuals who serve at DCA inform and empower consumers, promote consumer interests before lawmakers, enforce consumer protection laws, collaborate with law enforcement to fight consumer fraud, resolve disputes between consumers and businesses, and promote the use of fair and valid licensing examination programs.

OIS provides quality information technology services, support, and solutions to fulfill the daily business needs of employees in administrative offices, boards, and the public. OIS staff perform a variety of services, including:

- Enterprise Production and Application Support Services (EPass)
- Client Services
- Client Device Services (Client IT Support Services and Telecommunication Services)
- Business Integration/Project Management Office
- Enterprise Technology Services
- Server, Network and Security Services

The scope of this report is limited to only CISS.
Scope and Methodology

In 2018, SB 840 (Mitchell) directed DCA to conduct an internal assessment of the centralized services it provides to boards and bureaus “[i]n consultation with the Pro Rata Work Group . . [to] identify and prioritize the most critical services to be reviewed.” In response to this direction, the Organizational Improvement Office (OIO) is conducting a two-year study to identify opportunities for streamlining and improving the centralized services DCA provides to boards. The centralized services included in this project were chosen based on discussions with the DCA Pro Rata Workgroup, interviews with members of the group, and relevant responses from the 2017 DCA Services - Customer Satisfaction Survey.

This review is primarily concerned with the centralized services that include a customer service component. Many centralized services activities include both customer service and oversight components. In these instances, the review will attempt to improve customer service efficiency and effectiveness of the services provided while ensuring required oversight is maintained.

The OIO team conducted the Project Kickoff meeting attended by the DCA Chief Information Officer and the Chief Technology Officer on October 23, 2019 and followed up with a Town Hall meeting on November 4, 2019. The Town Hall meeting included OIS leadership and CISS staff. The meeting presented the project overview, methodology, and allowed for questions from the staff to be answered by OIO.

Surveys

As part of the data collection process, OIO conducted a survey of DCA employees who had contacted CISS within six months prior to the start of OIO’s research and another survey sent to board executives. Recipients of both surveys had an opportunity to provide recommendations for solutions and offer new strategies that CISS could utilize to improve their performance. The recommendations provided were primarily focused on improving communication, quality and timeliness, and training.

The CISS Employee Survey was distributed to 954 DCA staff and 94 responses were received (10% return rate).

While OIO acknowledges that the return rate was low and reminders and extensions were given to complete the survey, survey responses are not mandatory for staff to complete. Additionally, the responses received were largely consistent and the lack of a significant response rate may reflect general satisfaction with CISS. Other data gathering methods indicated a general satisfaction with service provision.
The second survey was distributed to 41 board executives (including executive officers, assistant executive officers, bureau chiefs, and deputy bureau chiefs), and 19 responses were received (46% return rate). The questions on both surveys were designed to prompt feedback on quality and timeliness of services expected of CISS and to elicit ideas for solutions and new strategies CISS could utilize to improve performance while creating short-term and long-term goals.

**Interviews**

Conducting interviews is an important part of the process improvement effort. Information gathered from interviews inform everything from preliminary discoveries to defining improvement opportunity implementation strategies. Using interviews can also help provide information above and beyond that of surveys because it can provide the details and context surrounding responses and prompt the interviewer to ask more probing questions.

To better understand CISS processes and best practices, OIO interviewed the CISS management team and their staff on their processes and the challenges they face fulfilling their responsibilities. OIO further asked how they currently address these challenges and what potential improvement opportunities they would like to see implemented. The management team were also asked to describe their long-term vision and define what success looks like for CISS.

**Process Mapping**

SB 840 identified process mapping as a desired methodology for identifying efficiencies in DCA’s centralized services: “Reviews shall consist of process mapping with the intent to identify opportunities to achieve efficiencies.”

OIO’s work involves intensive investigation necessary to develop a comprehensive knowledge of processes to resolve operational needs. This investigation requires a systematic approach with quantitative and qualitative analyses of data and processes. OIO staff effectively identify process “bottlenecks” and develop tools and documents that will assist programs and increase their efficiency and effectiveness.

OIO facilitated Business Process Mapping (BPM) with CISS staff to document their processes and find efficiencies. BPM provides a standard language for modeling business processes in a form that is accessible for business users. During the BPM stage, OIO employed three different mapping techniques referenced by the following titles: As-Is, Value Stream Analysis, and Could-Be mapping.

The As-Is stage is defined as the visualization of the “current state” of interrelated work tasks initiated in response to an event that will achieve a specific result for an actor in a process. During the As-Is stage, OIO’s staff worked with CISS subject matter experts.
(SMEs) to map their processes to determine durations, volume, roles, systems, tasks, and decisions. During the workshops, OIO inquired about the laws, regulations, and policies associated with the specific processes mapped. At the end of this stage, the CISS management team reviewed and approved the maps before moving onto the next stage of the BPM process.

Once the As-Is stage was complete, OIO conducted **Value Stream Analysis (VSA)**. During this process, OIO engaged CISS staff in identifying three critical areas of efficiency: value added, business necessity, or non-value added. For visualization, colored dots were added to each step on the As-Is map. Each colored dot is associated with the following improvement: green for value added, yellow for a business necessity, and red for non-value added. Any activity in the process that improves the product or service is value added. An activity required by law, regulation, and/or policy is considered a business necessity. An activity that does not contribute to the product or the process and should therefore be eliminated is considered non-value added. The VSA is an interactive process that involves both the SME and OIO staff and typically results in the discovery of operational improvements.

Once VSA was complete, OIO moved to the **Could-Be** stage. The Could-Be stage is defined as maps built upon existing As-Is maps that include proposed improved efficiencies, automation opportunities, and an envisioned future process. Using CISS staff recommendations, OIO reviewed the As-Is and VSA maps to recommend improvements to the process. One key benefit of this review was for CISS staff to gain a sense of ownership, which contributed to a desire to implement proposed changes.

OIO created As-Is maps of select CISS processes (the high-level CISS process, Intake, Triage, In-House Resolution and Desktop Management processes), eliciting feedback from CISS SMEs. OIO also reengineered the Desktop Management process to reflect what the process might look like if CISS utilized more documentation of successful resolutions of complex issues to serve as a knowledge base for staff to review when faced with similar issues.

**Data Gathering**

OIO requested reports from OIS to support the bottleneck discoveries that are impeding the quality and timeliness of the process. OIS provided standardized and ad hoc reports that included the length of time each ticket took to complete over the past year, broken down by category, method of ticket submission, and the number of unresolved tickets that have been closed. Challenges included lack of specific data regarding which email address tickets were submitted to, blank data fields, and timeliness of data received.
Review Summary

Respondents of both surveys that were sent out agreed that CISS staff are professional, friendly, and caring; they answer calls, resolve tickets promptly, and follow up when needed. Both survey results indicated customers had positive experiences with CISS and agreed that CISS performance meets their needs.

Executive Survey

The graphs below reflect board executive responses:

When asked about positive experiences board executives had with the CISS, the graph below indicates 95% of respondents found staff to be friendly, followed by an almost 80% rating for staff efficiency.

Please tell us about some positive experiences you have had with the OIS Service Desk. Below is a partial list of responses. Choose all that applies and/or add your own:

- Efficient Staff: 79%
- Friendly Staff: 95%
- Caring Staff: 47%
- Resolve Ticket Promptly: 68%
- Answer Call Promptly: 53%
- Staff Follows up in a Timely Manner: 58%
- Other: 0%

1 To simplify the surveys, CISS was referenced as Service Desk
Participants rated the overall quality as 95% Very Good or Good.

Rate the overall quality of the Service Desk's performance you have received:

- Very good: 53%
- Good: 42%
- Acceptable: 5%
- Very poor: 0%
- Poor: 0%

Ratings for overall timeliness of the CISS included a combined rating of 74% as either Very Good or Good.

Rate the overall timeliness of Service Desk's performance you have received:

- Very good: 42%
- Good: 32%
- Acceptable: 21%
- Poor: 5%
- Very poor: 0%
Nearly 80% of respondents found the combined quality of the CISS to be Very high or High quality.

Rate the overall quality of the Service Desk's communication you have received:

- Very high quality: 37%
- High quality: 42%
- Neither high nor low quality: 21%
- Low quality: 0%
- Very low quality: 0%

When board executives were asked about their experience regarding people working for the CISS, 89% of board respondents found staff to be professional, followed by 67% indicating they found staff to be caring. Inefficient staff were cited as an issue by 11% of respondents.

Regarding people working on the Service Desk, what have you experienced? Check all that apply:

- Inefficient Staff: 11%
- Staff's Lack of Effort: 6%
- Professionalism: 89%
- Efficiency: 61%
- Caring/Friendly Staff: 67%
- Other (please specify): 17%
Regarding resources, 68% of board executives indicated that CISS staff follow up when needed and 63% of staff answer calls promptly.

Regarding resources of the Service Desk, what have you experienced? Check all that apply:

- Tickets take too long to resolve: 5%
- Not enough staff answering calls: 16%
- Calls answered promptly: 63%
- Staff follows up when needed: 68%
- Other (please specify): 11%

For the question regarding processes, 82% of board executives found the process to be fast and easy. Twenty-nine percent of respondents cited ticket escalation protocol as an issue, along with tickets having to be reopened frequently by 12% of respondents.

Regarding Processes in the Service Desk, what have you experienced? Check all that apply:

- The Service Desk Process is too long/complex: 6%
- Service Desk Tickets getting reassigned too often: 6%
- Tickets have to be reopened frequently: 12%
- Ticket escalation protocol is unclear: 29%
- Process is fast and easy: 82%
- Other (please specify): 18%

The board executives provided ideas for solutions and/or new strategies the CISS could utilize to improve performance in addition to short-term and long-term goals they would like CISS to implement. These ideas focused on communication, including notifications to the customer when tickets are transferred to a new OIS team, making notes about the progress of the ticket visible to the customer in the system, providing an estimate of ticket resolution time, developing guidelines for escalating tickets, and developing a confirmation of issue resolution mechanism before the ticket is closed.
After sharing the above survey results, OIS management acknowledged the positive feedback and agreed some areas of service could be refined. OIS management has demonstrated leadership and already taken steps to address a number of improvement opportunities.

**Employee Survey**

The responses received in the Employee Survey were similar to those received in the Executive Survey. Overall, employees are satisfied with the CISS. Approximately 86% of respondents feel staff is friendly, with more than half of the respondents also indicating the staff is efficient and resolves their tickets promptly.

Please tell us about some positive experiences you have had with OIS Service Desk. Below is a partial list of responses.

Choose all that applies and/or add your own.

- Friendly Staff: 86%
- Efficient Staff: 59%
- Resolve Ticket Promptly: 55%
- Answer Call Promptly: 48%
- Staff Follows up in a Timely Manner: 39%
- Caring Staff: 31%
- Other: 13%

When asked how long it took to resolve their issue, 45% of respondents indicated it was resolved in 1 business day and 38% indicated it was resolved within the same week. Given that some issues cannot be resolved within 1 day, OIS management has stated they would like to see at least 70% of all tickets resolved in the first day.
How long did it take for the Service Desk to resolve your issue?

- Within 1 Business Day: 45%
- Within Same Week: 38%
- Within 1-2 Weeks: 11%
- More Than 2 Weeks: 6%

When employees were asked about the time it took to resolve their issue, 56% indicated that it took about what they had expected.

The time it took to resolve my issue was:

- Less time than I expected: 27%
- About what I expected: 56%
- More time than I expected: 17%

Employee survey results indicated 61% of customers had their issues resolved in the first attempt. A combined 16% indicated it took three or more steps to resolve an issue.
How many attempts by OIS did it take to resolve your issue?

- 1 attempt: 61%
- 2 attempts: 23%
- 3 attempts: 14%
- 4 attempts: 1%
- 5 or more attempts: 1%

When employees were asked to rate the quality of CISS’ performance, nearly 80% of the respondents combined indicated Very Good or Good.

Rate the overall quality of the Service Desk's performance you have received:

- Very good: 46%
- Good: 32%
- Acceptable: 15%
- Poor: 4%
- Very poor: 2%
Employees appear to be satisfied with the overall timeliness of CISS’ performance with more than 70% combined respondents indicating Very Good or Good.

Rate the overall timeliness of Service Desk’s performance you have received:

- Very good: 43%
- Good: 28%
- Acceptable: 19%
- Poor: 6%
- Very poor: 3%

More than 70% of survey respondents combined feel the quality of communication received from CISS is either Very High Quality or High Quality.

Rate the overall quality of the Service Desk’s communication you have received:

- High quality: 37%
- Very high quality: 34%
- Neither high nor low quality: 19%
- Low quality: 7%
- Very low quality: 2%
Regarding the frequency of communication exchanged between the CISS and employees about their ticket, 31% of respondents indicated they receive daily communication from CISS while their ticket is being worked, and 33% of respondents indicated they receive communication a few times a week. Conversely, 22% of respondents indicated receiving no communication at all.

**How frequently does the Service Desk communicate with YOU about your ticket?**

- **Daily**: 31%
- **A few times a week**: 33%
- **Weekly**: 13%
- **Monthly**: 0%
- **Quarterly**: 2%
- **Not at all**: 22%

When asked about their experience regarding people working in CISS, only 13% selected inefficient staff, and 15% selected staff’s lack of effort, while 17% selected other. Additional responses were provided for other selection and varied from inconsistent interactions and responses, to staff is well-trained and always handles IT issues promptly. Depending on who you work with, staff skills and experience vary.

**Regarding People working in the Service Desk, what have you experienced? Check all that Apply.**

- **Inefficient Staff**: 13%
- **Staff’s Lack of Effort**: 15%
- **Professionalism**: 67%
- **Efficiency**: 68%
- **Caring/Friendly Staff**: 71%
- **Other (please specify)**: 17%
For the question regarding resources, 23% of respondents indicated that tickets take too long to resolve, 17% indicated not enough staff answering calls, and 18% had other responses. Other responses ranged from tickets take a long time with no communication, staff service is inconsistent, had to submit tickets multiple times for the same issue, and tickets are closed without communication or resolution. Although 60% of the respondents indicated that calls are answered promptly, and 63% indicated staff follow up when needed, communication is an area OIS management recognizes as an area where improvements could be implemented.

Regarding Resources of the Service Desk, what have you experienced? Check all that Apply.

- Tickets take too long to resolve: 23%
- Not enough staff answering calls: 17%
- Calls answered promptly: 60%
- Staff follows up when needed: 63%
- Other (please specify): 18%

For the question regarding processes, 15% of respondents indicated that the process takes too long/complex, 10% indicated that tickets get reassigned too often, 14% indicated tickets have to be reopened frequently, 34% indicated that ticket escalation protocol is unclear, and 22% had other responses. Most of the other responses stated there is not enough information or communication on the ticket when it's reassigned, closed without resolution, or when it's completed.
Regarding Processes in the Service Desk, what have you experienced? Check all that apply.

- The Service Desk Process is too long/complex: 15%
- Service Desk Tickets getting reassigned too often: 10%
- Tickets have to be reopened frequently: 14%
- Ticket escalation protocol is unclear: 34%
- Process is fast and easy: 59%
- Other (please specify): 22%

The employees provided ideas for solutions and/or new strategies CISS could utilize to improve performance, and short-term and long-term goals they would like CISS to change or implement. These ideas were similar to those provided by the executives and also focused on communication, such as notification to the customer when the status of tickets changes, the length of time the ticket will take to complete, and timely communication with the customer. Other ideas included providing consistent training to CISS staff, utilizing desk manuals, and applying industry specific best practices.

OIS management recognizes these issues exist and are addressing them by focusing on communication and increasing utilization of data to monitor quality and timeliness.
Data Analysis

OIO utilized both standard and ad hoc reports for the purposes of validating and determining improvement opportunities within CISS’ processes. The primary focus was on the Desktop Management process. OIO discovered that 54% of all tickets submitted are categorized as Desktop Management issues. These are issues that can generally be resolved solely by CISS personnel.

OIO identified several opportunities for improvement that were supported by data pulled from surveys and reports. Through surveys, OIO found that, in some instances, tickets were being closed without being resolved. This issue occurred when CISS technicians had unsuccessfully attempted to contact the customer for more information regarding the ticket.

There is a disparity among CISS technicians who closed tickets without a resolution and those who resolved a ticket before closing it. This disparity supports another improvement opportunity OIO found during interviews with staff and through surveys: inconsistency in the way CISS technicians do their jobs.
DCA is comprised of over three dozen boards and many of these boards have sites that are not physically located at DCA’s headquarters in Sacramento. After collecting and analyzing data, OIO discovered that it takes longer for tickets to be resolved at many of the remote sites. As indicated in the chart below, it takes approximately 11 days for a ticket to be resolved for a customer located at DCA headquarters (HQ1 and HQ2); however, some remote locations have ticket durations approaching 15-20 days.

An issue that was revealed in the surveys and during interviews with OIS management was first-call resolution. First-call resolution is defined as an issue that is resolved within 24 hours of submission. From a customer service standpoint, it is best to resolve all the customer CISS issues in a single contact. As of late October 2019, about 7% of all tickets issued were being resolved within 24 hours.
A ticket can be submitted to the CISS using several methods: phone, email, walk-in, the Cherwell Portal, and an event occurring such as a network outage affecting an entire site. If a ticket is submitted as an email to @OISTICKET, the ticket is automatically created by the system and tracked. However, if a ticket is submitted to @OISSERVICEDESK, a ticket must be manually created by a CISS technician and is not tracked. In 2019, 43% of all tickets were submitted through email. The ticket source can be found in the ticket details as seen in the chart below. The “Email” data includes tickets submitted through both emails.

![Ticket Input Methods January - October 2019](chart.png)
Discoveries

The data collected from mapping processes, and the interviews conducted with OIS management and staff revealed opportunity for efficiency improvements in the following areas:

1. At the initial triage step when tickets are received with insufficient information and are not categorized correctly;
2. When the ticket is routed to another OIS team for resolution because the ticket cannot be resolved within CISS;
3. Fixing the customer’s issue by physically visiting the customer when it is faster to remote into the customer’s computer; and,
4. Premature closure of ticket without resolution.

Based on the activities conducted, OIO has identified the following areas for opportunities of improvement: Communication, Quality and Timeliness, and Training.
1. Communication

**Improvement Opportunity 1.1: Create a comprehensive communication plan with topics, recipient, frequency, and service level targets.**
Currently, there is inconsistency in the way information is communicated internally to OIS staff, as well as externally to customers. As a result, messages are miscommunicated, assumptions are made, and information is lost. By creating a communication plan, all CISS staff and management would have a reference tool to use as a guide in multiple scenarios while targeting various audiences. This plan should include ways to address common issues, identify which audiences would need to receive what information, how often, and what the expected outcome might be regarding the time it would take to resolve a specified issue. A communication plan would also set standards on the level of expectations CISS management and OIS leadership have of their staff.

**Improvement Opportunity 1.2: Create user groups between the board liaisons and representatives from the CISS.**
User groups will allow for the exchange of ideas and information between the CISS and boards to address issues as they occur. Regularly scheduled user group meetings will also provide the opportunity for CISS staff to provide OIS updates and answer questions the board liaisons may have.

**Improvement Opportunity 1.3: Provide more self-help resources.**
Self-help resources provide customers with information they can use to resolve their own issues, allowing CISS staff to focus on more complex issues. Currently, any self-help resources available are not easy to find. Links on the intranet are not clearly marked or require customers to create a Cherwell account to request help. By including a prominent frequently asked questions (FAQs) resource on the intranet, customers could attempt to resolve their issues independently before submitting a ticket. Making the customer aware of these resources would alleviate the number of tickets received. Customers indicated that there are not enough self-help resources available and they don’t know where to find the ones that are available. Management should consider providing onsite training on Cherwell, adding more FAQs, tutorials, and YouTube videos as self-help resources. The marketing of these resources should occur on a regular schedule to increase redundancy of exposure and to ensure new employees are aware of these resources. A chatbot-type assistant is also another tool to consider. Making the customer aware of these resources would enable them to troubleshoot and find solutions to non-complex issues. This would alleviate the number of tickets received to CISS and allow staff to provide quality resolution to the more complex issues.

OIS has embraced this opportunity and already rolled out their “Captain Admin” intranet resource. Captain Admin helps launch new IT products on select Tuesdays throughout the year. Some of the topics include utilizing Microsoft Teams, Outlook Insights, and Fighting Phish.
Improvement Opportunity 1.4: Make accessing Cherwell an easier process through single sign-on capability.
OIS leadership has stated they would prefer customers use Cherwell as their primary method of submitting a ticket. The problem is that customers are either not aware of Cherwell as a resource or are not able to successfully sign on. OIO staff recommends utilizing a single sign-on method, like what is currently used on a browser-based email system and Managing Office Time Off (MOTO) to promote ease of use for the customer.

Improvement Opportunity 1.5: Modify the ticket resolution message to ask the customer to confirm satisfaction of the work done.
CISS has a policy that states a ticket will be considered resolved and closed after three unsuccessful attempts to contact the customer. In some instances, this results in tickets being closed without the customer’s issue being resolved. OIO recommends that, before closing the ticket, the system generate an email notification to the customer with a link to re-open the ticket if the customer is not satisfied. Documenting the progress status of the ticket and explaining what was done to resolve the issue will help the customer understand why the ticket was closed. Asking the customer to confirm satisfaction of the work done is additional communication that will provide more feedback to CISS staff regarding customer satisfaction. CISS has already implemented this solution.

Improvement Opportunity 1.6: Implement the ACT (accurate, consistent, timely) method of communication for better customer service.
In some instances, customers have expressed concern over the lack of communication from CISS staff while their tickets are being resolved. If tickets cannot be resolved in the first attempt, OIO recommends communicating frequently with customers until the issue is resolved. By ensuring information is conveyed to customers in an accurate, consistent, and timely manner, CISS will improve customer service and help promote trust and confidence among the boards.

Improvement Opportunity 1.7: Utilize tools, such as a calendar and/or a dashboard, to notify customers of outages.
Through surveys and interviews, OIO discovered that customers are often unaware of sitewide scheduled outages. Currently, OIS sends out emails informing the Department of scheduled outages for events such as maintenance or repair. In many cases, these emails are not read. Publishing a live calendar or creating a dashboard on the OIS intranet site of scheduled outages would be ways to keep customers updated. OIS could inform customers of where these tools are and how to access them through the user group meetings (see Improvement Opportunity #1.2) and other communications.

Improvement Opportunity 1.8: Schedule regular onsite visits and virtual meetings with remote offices.
Survey results indicated slow response times to remote offices. In many cases, service to remote sites takes longer and, depending upon the issue, may result in work stoppages. Scheduling regular onsite visits and virtual meetings by CISS staff and publishing those
dates will allow for better communication between DCA and the boards. Regularly scheduled check-in meetings will promote more positive relationships with customers by instilling confidence and trust while also feeling heard.

**Improvement Opportunity 1.9:** When an outage is identified, CISS managers should notify CISS staff in real time.
During OIO interviews, staff stated when outages occur, CISS staff are not made aware of the event until they receive a call from a customer about the outage. Additionally, outages may result in an increase in service requests. Once managers become aware of an outage, they should notify all staff, in real time, of the outage and provide them with as much information as possible, including expectations to assist staff in meeting the needs of their customers.

**Improvement Opportunity 1.10:** Create a self-subscribing OIS notification group, which will be used to push SMS messages to inform customers of outages.
When outages occur, especially unplanned outages, CISS staff field many calls from customers inquiring as to the problem and the expected time of resolution. This time spent answering calls could be used to work on resolving more critical issues. Sending SMS (short message service [cellular phone text service]) messages to members of this self-subscribing group during planned or unplanned outages would keep customers updated and allow them to plan around those outages. The SMS could also be used to market self-help resources and new initiatives.

**Improvement Opportunity 1.11:** Publish and communicate service level targets for customers using various methods (website, email, etc.).
Customers have indicated they do not know how long it takes for their issues to be addressed. OIS has already established service level targets estimating how long specific issues should take to resolve. Making these targets available to customers will educate them on expected durations and reduce the number of calls regarding the status of their ticket.

**Improvement Opportunity 1.12:** Provide multiple ways to alert technicians when new tickets are assigned.
The only way technicians are alerted that a ticket has been received is by a flashing on the Cherwell screen once a ticket has been submitted. If technicians are away from their desks, they might not be aware they have received a new ticket. OIS should explore other methods for implementing alerts for technicians to indicate a ticket has been received and is in their queue.

**Improvement Opportunity 1.13:** Consolidate both email accounts.
The @OISSERVICEDESK email address was originally created for the CISS when their responsibilities included taking calls and forwarding issues to the appropriate OIS areas for resolution. It is the email address currently published on the OIS intranet site for the CISS. However, this email account was intended to be used solely for questions that would typically not result in a ticket being submitted. When the restructure of CISS
occurred, the @OISTICKET email account was created and designed to automatically create tickets. However, customers continued to submit tickets using the @OISSERVICEDESK email address. Because tickets must be manually entered and cannot be tracked if received through the @OISSERVICEDESK address, OIO suggests consolidating it with the @OISTICKET email address to avoid customer confusion. By consolidating the two email accounts, CISS will avoid losing historical data and will result in capturing all tickets that are submitted through email. OIO further recommends creating a communication campaign that announces the consolidation and promotes customers to use the @OISTICKET email address, in addition to notifying customers that the @OISSERVICEDESK email address will no longer be active after a certain date. OIO recommends using various media for this campaign (e.g., DCA’s Did You Know newsletter, DCA’s intranet, email) starting immediately and phasing out by the end of 2020.

**Improvement Opportunity 1.14: Direct staff to remotely fix the customer’s issue first and conduct in-person visits only if needed.**

CISS staff have indicated they prefer to visit a customer’s desk in person as opposed to logging in remotely into the customer’s computer. Staff have stated they believe this is a way to give better customer service by providing “face time” to the customer. However, when visits occur, additional time is needed, and it takes away from the time staff are available to answer calls. If a CISS staff is on site away from DCA headquarters, this could result in decreased productivity. Management can utilize productivity reports showing the time saved remoting into a customer’s computer versus visiting a customer in person for the same issue. Management can also monitor the percentage of remote fixes and communicate SMART (specific, measurable, achievable, relevant, timely) goals targeting a specific percentage. Other strategies might include having the leads who assign the tickets determine if a visit is necessary and update the ticket accordingly. Management should also provide customer service training specific to service delivery over a remote interface and include this expectation in duty statements. To better meet customer needs, an addition of “Would you prefer to have in-person communication from a CISS technician?” could be added to ticket requests.

**Improvement Opportunity 1.15: Provide training to ensure a consistent knowledge base for all staff.**

Survey results indicated that there are inconsistent levels of service depending on the CISS staff who is assigned the ticket. Providing standard training to all staff would ensure the same level of information distribution, enhance the knowledge base, and provide consistency in working on tickets of various complexity. Establishing a comprehensive knowledge base would also allow less experienced staff to access the resources needed to resolve higher complex issues in a timely manner.
2. Quality and Timeliness

Improvement Opportunity 2.1: Conduct an open forum with staff to discuss the CISS Mission, Vision, and Values, how best to support them, and follow up the exercise with documented policies and procedures.
Select CISS staff have indicated they are unaware of their management’s priority. They believe that management focuses first on timeliness in resolving tickets. Staff have stated they are instructed to close tickets after three unsuccessful attempts of contacting the customer. There is also a focus on first-call resolution. Management has stated their focus is on quality and timeliness equally. Management has also stated they are receptive to tickets taking longer to close if staff can provide justification through documenting the steps taken and they communicate frequently with the customer.
Management wants staff to focus on quality in a timely manner. Conducting an exercise on CISS Help Desk’s Mission, Vision, and Values and creating goals will focus staff’s attention on their role, the purpose of their unit, and the value they provide to the customer. This would also give all CISS staff a sense of ownership, which would encourage them to strive to meet their customers’ needs. Once the Mission, Vision, and Values are established, the next step would be to create policies and procedures that align with the goals the unit set.

Improvement Opportunity 2.2: Perform quality assurance on all activities.
Staff are often unaware of the impact their performance has on the overall process. Providing awareness and conducting quality assurance reviews on staff’s performance while monitoring performance would provide greater quality to the work performed and would hold staff accountable. Monitoring first-call resolution and tickets that have been open for 30, 60, and 90 days would provide insight to the areas where more training, oversight, or resources might be needed.

Improvement Opportunity 2.3: Monitor staff workload to avoid delays.
Monitoring staff workload by keeping track of tickets that have been reopened or have been in pending status for a significant period of time allows management to redirect work to keep the work flow moving consistently. OIO recommends CISS management continuously assess work assignments for different level technicians and adjust the workload as needed and utilize the annual performance evaluation review for documenting improvements needed. Management should also provide feedback and address areas where improvements are needed (see Improvement Opportunity 2.7).

Improvement Opportunity 2.4: Utilize data reports to analyze staff performance.
Providing data on the number of tickets received, in progress, pending, or closed by staff member is an effective way to track performance. These reports could be used to support meeting unit production goals and hold staff accountable for their work performance.
**Improvement Opportunity 2.5:** Conduct one-on-one meetings to discuss performance and offer assistance.

Regular one-on-one meetings between staff and management are an opportunity to clarify expectations, monitor progress, express concerns, and ask for help. They are also an opportunity for a manager to follow up on staff work and remove barriers.

**Improvement Opportunity 2.6:** Provide outreach to staff on the value of an Individual Development Plan (IDP) to promote staff development.

Staff and management are encouraged to utilize IDPs for staff development. Listing annual goals and understanding the competencies needed to achieve these goals is a valuable topic for discussion when conducting one-on-one meetings with staff. While voluntary on the staff’s behalf, utilizing IDPs will allow managers to support their staff in reaching their goals, provide them with assistance in seeking training for problem areas, and encourage their staff to implement their training plan.

**Improvement Opportunity 2.7:** Focus on knowledge transfer and succession planning by capturing institutional knowledge.

The CISS unit is comprised of 11 technicians, two of whom serve in a lead capacity and have stated they are eligible to retire within five years. These leads possess a great deal of experience and knowledge. There should be a plan to transfer their knowledge before they retire. CISS could use the maps completed during this review to develop comprehensive policies and procedures.

**Improvement Opportunity 2.8:** Establish expectations for staff answering calls.

Through staff interviews, OIO learned that some CISS staff will let a phone call roll to another technician, which delays customer response time and builds resentment among CISS staff. To improve quality and provide better customer service, OIO recommends management hold staff accountable by providing consistent training, monitoring staff call volume, and establishing clear expectations and consequences for those who choose not to follow instructions. Training should be provided, when needed, to staff struggling with this task. Cross-training has been proven to be effective in these situations.

**Improvement Opportunity 2.9:** Update Cherwell accounts at the time changes occur.

Survey respondents indicated the ticketing system is not user-friendly. Soliciting feedback from the customer and updating the system accordingly will make it easier for the customer and the technician to get issues resolved in a timely manner.

**Improvement Opportunity 2.10:** Make ticket routing and categorization clear and consistent.

When tickets are received that lack critical information, they may be routed to the wrong specialty team. This causes delays in resolution. Contacting the customer to request more information prior to routing the ticket would assist in reducing the backlog that results from these delays and would allow for a quicker ticket resolution.
Improvement Opportunity 2.11: Improve first-call resolution.
CISS management has expressed that they would like to see at least 70% of all tickets submitted resolved on the first call. Currently, only 7% of all tickets are resolved within 24 hours. To improve first-call resolution, OIS should develop a standardized periodic report to track this metric. This report can be used to monitor progress toward achieving this goal. Another way to increase first-call resolution is to create a list of the top 10 most common issues for CISS staff reference. This would help all staff to develop a common knowledge base and assist with focused areas for training.
3. Training

**Improvement Opportunity 3.1:** Ensure staff are appropriately trained and cross-trained to increase levels of efficiency throughout the unit.
Both surveys indicated the service provided to customers varied depending upon which CISS staff worked their ticket. To help mitigate this issue, OIS should standardize training for all staff, create procedure manuals with process flowcharts, and develop operations manual/guides for common technical issues. OIS should also encourage staff to apply industry best practices and make staff aware of resources available to them, including the training catalog, and allow them time to utilize these resources.

**Improvement Opportunity 3.2:** Offer diverse training to align with increased complexity of tasks.
Information technology is constantly evolving. To maintain a quality level of expertise, it is necessary for CISS staff to stay informed and seek training to improve their technical skills. Additionally, all staff would benefit from customer service skills training. Management should encourage staff to regularly participate in the completion of IDPs and utilize soft skills training offered by SOLID involving communication, time management, project management, and similar trainings.

**Improvement Opportunity 3.3:** Develop standardized onboarding training.
Staff have stated they are not aware of any formal onboarding training. New staff are trained simply by job shadowing other staff for several weeks. Since more veteran staff have their own interests and strengths, the training new staff receive, and the meeting of management’s expectations are inconsistent. Developing a standardized onboarding training plan would help incoming staff develop a consistent way of performing the job.
CISS Maps

As-Is Maps

- High Level Client IT Support Services Process
  - Intake
  - Triage
  - In-house Resolution
- Desktop Management Process

Value Stream Analysis

- Desktop Management Process

Could-Be

- Desktop Management Process
## As-Is Client IT Support Services

### Intake
1. Receive request, review and generate ticket (1 min)

### Triage
2. Review and analyze ticket (5 min)
3. Is sufficient information provided? (1 min)
   - Yes: Go to Categorization
   - No: Contact customer for more information (5 min)

### Categorization
5. Categorize and prioritize received ticket (1 min)
6. Is ticket associated with in-house resolution? (1 min)
   - Yes: Go to In-House Resolution
   - No: Route to appropriate team for resolution (5 min)

### Routing
7. Route to appropriate team for resolution (5 min)
8. Ticket routed correctly? (1 min)
   - Yes: Go to End case 1
   - No: Go to Intake

### In-House Resolution
9. Contact customer to acknowledge receipt (5 - 15 min)
10. Is this an incident? (1 min)
   - Yes: Go to Triage
   - No: Go to Categorization

### Incident
11. Is a task needed for the request? (1 min)
   - Yes: Create task (1 - 5 min)
   - No: Resolve, close and update (30 min - 2 hours)

### Request
12. Troubleshoot requested incident (5 min)
13. Contact Customer to obtain more information (5 min)
14. Remote into customer’s computer or visit customer physically if needed (2 – 60 min)
15. Monitor and update (1 – 5 min)
16. The system does not notify technician when task is cleared. Technician has to check in periodically to see if task is cleared.
17. The system does not notify technician when task is cleared. Technician has to check in periodically to see if task is cleared.
18. Resolve, close and update (30 min - 2 days)

### Notes
- Technician may forget to close ticket which creates a backlog of open tickets.
- When closing the ticket in Cherwell it auto generates an email to customer that ticket is closed.
- The system does not notify technician when task is cleared. Technician has to check in periodically to see if task is cleared.

### Approval
Approved on: _______________   By: ______________________________________ (Jason Piccione)
Narrative Description of Business Process

**Trigger:** Customer has a Service Desk issue

1. Receive request, categorize and generate ticket
2. Review and analyze ticket
3. Sufficient information provided? If yes, proceed to step 5. If no, proceed to step 4
4. Contact customer for more information
5. Categorize and prioritize received ticket
6. In house resolution? If yes, proceed to step 9. If no, proceed to step 7
7. Route to appropriate unit for resolution
8. Ticket routed correctly? If yes, end case 1. If not, proceed to step 7
9. Contact customer to acknowledge receipt
10. Investigate and diagnose request
11. Is this an Incident? If yes, proceed to step 12. If no, proceed to step 16
12. Troubleshoot requested incident
13. Contact Customer to obtain more information
14. Remote into customers computer or visit customer physically if needed
15. Is a task needed for the request? If yes, proceed to step 16. If no, proceed to step 18
16. Create task
17. Monitor and update, proceed to step 18
18. Resolve, close and update, end case 2

**End Points and Durations:**

Case 1: Ticket is correctly routed to the appropriate unit for resolution. (Case 1 ends at step 8, yes path) (process time between 9 min – 35 min with up to ~1 week and 2 days wait time)

Case 2: Ticket is resolved and closed. (case 2 ends at step 15) (process time between 58 min – 3 hours and 40 min, with up to 1 hour and 5 min – 2 weeks wait time)
As-Is Intake Process

Customer may use:
- Portal
- Email
- Phone Call
- Walk-in

1. Submit Request or Incident

2. Portal?
   - Yes: 2-5 min
   - No: 1 min

3. Email?
   - Yes: 1 min
   - No: 1 min

4. Phone call?
   - Yes: 1 min
   - No: 1 min

5. Walk-in ticket needed?
   - Yes: 1 min
   - No: 1 min

6. Create ticket in System

7. Ticket is placed in a holding queue

8. Oisticket mailbox?
   - Yes: 1 min
   - No: 1 min

9. Ticket is created in the system

10. Receive ServiceDesk email request

11. Create Ticket in DSC

12. Categorize and prioritize received ticket

13. Ability to resolve ticket in house?
   - Yes: 1 min
   - No: 1 min

14. Route to appropriate team for resolution

End Case 1

End Case 2

End Case 3

The system used is called Cherwell. It is also referred to as DSC (Department Support Center).

The Portal is a website the customer uses to input ticket into the Cherwell system.

There are two email boxes. If an email is sent to OISTicket a ticket will autogenerate. If an email is sent to ServiceDesk and a ticket is required it must be manually entered.

If it is a walk-in, sometimes a ticket is not created if the issue can be resolved on the spot.

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If it is a walk-in, sometimes a ticket is not created if the issue can be resolved on the spot.
Narrative Description of Business Process

**Trigger:**
Customer submits a ticket for a request or an incident

1. Submit Request or Incident
2. Portal? If yes, proceed to step 6. If no, proceed to step 3
3. email? If yes, proceed to step 8. If no, proceed to step 4
4. Phone call? If yes, proceed to step 11. If no, proceed to step 5
5. Walk-in ticket needs to be created? If yes, proceed to step 11. If no, end Case 1
6. Create ticket in System
7. Ticket is placed in a holding queue
8. Is it to OisTicket mailbox? If yes, proceed to step 9. If no, proceed to step 10
9. Ticket is created in the system
10. Receive ServiceDesk email request
11. Create Ticket in DSC
12. Categorize and prioritize received ticket
13. Ability to resolve ticket in house? If yes, proceed to In-House Resolution. If no, proceed to step 14
14. Route to appropriate team for resolution. End Case 3

**End points and Durations:**
Case 1: Ticket does not need to be created if the issue can be resolved on the spot. (Case 1 ends at step 5, no path) (process time between 1 min - 3 min – no wait time)

Case 2: Ticket goes through the In-House Resolution process. (Case 2 ends at step 13, yes path) (process time between 5 min - 8 min - no wait time)

Case 3: Ticket is routed to appropriate team for resolution. (Case 2 ends at step 14, no path) (process time between 6 min - 9 min, - no wait time)

**Associated Documents and Artifacts**
- N/A

**Critical Information Inputs**
- Ticket information on the request

**Process Improvement Opportunities** (including applicable automation recommendations)
- Receive sufficient information from the customer when the ticket is submitted. This will allow staff to triage the ticket correctly
- Contact the customer to acknowledge receipt of ticket

**Authority Cited**
- N/A

**Contributors**
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- Michael Schroeder
- David Test
- Pallavi Mohapatra
- Scott Robinson
- Andy Berger
- Cady Smithline

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As-Is – Intake Process
Approved on: ___________________   By: ______________________________________ (Jason Piccione)

Office of Information Services (OIS) – Client IT Support Services (CISS)

Page 2 of 2

01/10/2020
As-Is Triage Process

1. Intake
2. Review and analyze ticket
3. Sufficient information provided?
   - Yes: Categorize and prioritize in Cherwell
   - No: Contact customer for needed information
4. Ability to resolve ticket in-house?
   - Yes: In-House Resolution
   - No: Receive ticket back to be re-routed to appropriate team
5. Contact customer for needed information
6. Route to appropriate team for resolution
7. Ticket routed correctly?
   - Yes: End Case 1
   - No: Wait time 5 min – 2 days
8. Ticket routed back to be re-routed to appropriate team
9. Ticket is placed in a holding queue

Tickets may come back or the other team may route it to appropriate team.
### As-Is - Triage Process

**Trigger:**
- Ticket is in the technician queue

1. Review and analyze ticket
2. Sufficient information to route? If yes, proceed to step 3. If no, proceed to step 5.
3. Categorize and prioritize in Cherwell
4. Ability to resolve ticket in house? If yes, proceed to In-House Resolution. If no, proceed to step 6.
5. Contact customer for needed information
6. Route to appropriate team for resolution
7. Ticket routed correctly? If yes, end of case 1. If no, proceed to step 8.
8. Receive ticket back to be re-routed to appropriate team
9. Ticket is placed in a holding queue

**End Points and Durations:**
- Case 1: Ticket is routed correctly. (Case 1 ends at step 7, yes path) (process time between 3 min - 5 min – no wait time)

**Frequency:**
- Daily
- Volume: 72 – 90

**Critical Information Inputs**
- Ticket request information

**Process Improvement Opportunities (including applicable automation recommendations)**
- Contact the customer to request more information to be able to determine where to route the ticket
- Training for staff on where to send the tickets
- Document of flowchart to for the staff (procedure manual)
- FAQ for customers

**Authority Cited**
- N/A

**Contributors**
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- Scott Robinson
- Andy Berger

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**As-Is - Triage Process**

Approved on: ____________________  By: _______________________________________

(Jason Piccione)  01/10/2020
As-Is In-House Resolution Process

1. Triage
   - Technician has to go into Cherwell to check if there was a ticket assigned to them
   - Time: 1 min

2. Receive new ticket in Cherwell
   - Time: 5 min

3. Investigate and diagnose ticket
   - Time: 1 min

4. Is this a request?
   - Yes: 3
   - No: 5

5. Troubleshoot incident?
   - Yes: 4
   - No: 7

6. Create task ticket in Cherwell
   - Time: 1 min

7. Is task needed?
   - Yes: 6
   - No: 10

8. Contact customer to obtain more information
   - Time: 5 min

9. Monitor to make sure task is cleared
   - Time: 30 min

10. Remote into customer’s computer or visit customer physically if needed
    - Time: 2 min – 60 min

11. Resolve ticket
    - Time: 5 min

12. Update and close ticket in Cherwell
    - Time: 30 min – 2 hours

13. End Case 1
    - The system does not notify technician when task is cleared. Technician has to check in periodically to see if task is cleared.
    - Wait time up to 2 weeks
    - Technician may forget to close ticket which creates a backlog of open tickets
    - Sometimes the issue can be resolved on the spot and no troubleshooting is needed
    - If the ticket is not a request then it’s an incident
    - Request may be a new computer, new software or a move
    - When troubleshooting the customer needs to be always contacted for more information
    - Resolve ticket may result in contacting the vendor or giving the customer new technology

Approved on: _____________________  By: ______________________________________ (Jason Piccione)  01/10/2020
Narrative Description of Business Process

Trigger:
Ticket is assigned to technician in Cherwell.

1. Receive new ticket in Cherwell
2. Contact customer to acknowledge ticket has been received
3. Investigate and diagnose ticket
4. Is this a request? If yes, proceed to step 7. If no, proceed to step 5.
5. Troubleshoot incident? If yes, proceed to step 8. If no, proceed to step 11.
6. Create task ticket in Cherwell
8. Contact customer to obtain more information
9. Monitor to make sure task is cleared
10. Remote into customer’s computer or visit customer physically if needed
11. Resolve ticket
12. Update and close ticket in Cherwell

End points and Durations:
Case 1: Ticket is updated and closed in Cherwell. (Case 1 ends at step 12) (process time between 45 min - 3 hours and 15 min with up to – wait time up to 2 weeks)

Frequency: Daily
Volume: 30 - 40

Associated Documents and Artifacts
• N/A

Critical Information Inputs
• Ticket request

Process Improvement Opportunities (including applicable automation recommendations)
• Document the process flow
• Automatic notifications by the system that task has been completed
• Remote into customer’s computer first, then visit if needed

Authority Cited
• N/A

Contributors
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Approved on: ____________________  By: ________________________ (Jason Piccione)  01/10/2020

Office of Information Services (OIS) – Client IT Support Services (CISS)
As-Is Desktop Management Process

1. Contact Service Desk

2. Is this a desktop management issue?
   - No: Move to appropriate team
   - Yes: Assign ticket to Service Desk Technician

3. Move to appropriate team

4. Assign ticket to Service Desk Technician
   - 1-5 min

5. Receive ticket
   - 1 min

6. Review ticket description

7. Verify ticket has enough information to resolve
   - 2 min

8. Contact customer to confirm receipt of ticket and/or get more info
   - Technician is required to contact customer within 2–24 hrs
   - Wait time up to 1 week
   - Close the ticket after 3 attempts

9. Receive email and/or call requesting more information, or informing issue is resolved
   - Wait time up to 1 week

10. Customer responds within reasonable time?
    - No: 
    - Yes: To Pg. 2

11. Customer is contacted at least three times within 1-2 weeks.

12. Customer is contacted at least three times within 1-2 weeks.

13. Go over customer’s response
   - Troubleshoot could take longer than 20 min depending on complexity of the issue

14. Research potential solutions by utilizing the internet and available internal resources

15. Troubleshoot and/or analyze which action should be taken
   - Within scope?
     - Yes: Investigate
     - No: Diagnose

16. Investigate

17. Diagnose

18. Wait time up to 1 week

19. Close the ticket after 3 attempts

Office of Information Services (OIS) – Client IT Support Services (CISS)

Approved on: _______________   By: ______________________________________ (Jason Piccione)

Page 1 of 3
**Narrative Description of Business Process**

**Trigger:** Customer has Service Desk Issue

1. Customer contacts Service Desk
2. Is this a desktop management issue? If yes, proceed to step 4. If no, proceed to step 3
3. Move to appropriate team. Ed case 1
4. Assign ticket to Service Desk Technician
5. Receive ticket
6. Review ticket description
7. Verify ticket has enough information to resolve
8. Contact customer to confirm receipt of ticket and/or get more info
9. Receive email and/or call requesting more information, or informing issue is resolved
10. Customer responds within reasonable time? If yes, proceed to step 11. If no, proceed to step 22
11. Go over customer’s response
12. Research possible fixes
13. Troubleshoot and/or analyze which action should be taken
14. Within scope? If yes, proceed to step 15. If no, proceed to step 3
15. Can technician complete the job? If yes, proceed to step 20. If no, proceed to step 16
16. Is task needed? If yes, proceed to step 17. If no, proceed to step 20
17. Create task in Cherwell
18. Assign to appropriate team
19. Monitor ticket and update
20. Fix issue
21. Document ticket
22. Resolve ticket
23. Email customer to inform issue is resolved
24. Customer reopened ticket? If yes, proceed to step 4. If no, proceed to step 25
25. Close Ticket

**End Points and Durations:**

**Case 1**
Ticket is assigned to appropriate team. (Case 1 ends at step 3, no path) (process time 6 min – no wait time)

**Case 2**
Customer ticket is closed. (Case 2 ends at step 25, no path) (process time between 28 min - 2 weeks and 85 min with up to ~2 weeks wait time)

**Frequency:** Daily

**Volume:** 30 – 40

**Associated Documents and Artifacts**
- N/A

**Critical Information Inputs**
- Ticket information

**Process Improvement Opportunities (including applicable automation recommendations)**
- Would like to notify customer after ticket is resolved to confirm all is working
- Route servicedesk email to oisticket email box
- Reconfigure Cherwell ticketing system
- Provide checklist(s) or self-help guides on Cherwell when possible
- Questionnaire on Portal to help with categorization
- Further training

**Authority Cited**
- N/A

**Contributors**
- Scott Robinson
- Pallavi Mohapatra
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- Michael Garcia
- Salvador Carrion
- David Test
Customer Service Desk Lead/Technician

1. Contact Service Desk
2. Is this a desktop management issue?
   - Yes: Move to appropriate team
   - No: End case 1

Service Desk Technician

3. Assign ticket to Service Desk Technician
4. Receive ticket
5. Review ticket description
6. Verify ticket has enough information to resolve
7. Move to appropriate team
8. Within 2-24hrs, technician is required to contact customer
9. Receive email and/or call requesting more information, or informing issue is resolved
10. Customer responds within reasonable time?
   - Yes: Customer is contacted at least three times within 1-2 weeks
   - No: Close the ticket after 3 attempts

Multiple scenarios:

- Troubleshoot and/or analyze which action should be taken
- Troubleshooting takes longer than 20 minutes, depending on complexity
- Troubleshooting could take longer than 20 minutes
- Research possible fixes

Office of Information Services (OIS) - Client IT Support Services (CISS)
01/10/2020
Page 1 of 3

VSA Desktop Management Process

Approved on: _______________   By: _______________________________________(Jason Piccione)
Narrative Description of Business Process

**Trigger:** Customer has Service Desk Issue

1. Customer contacts Service Desk
2. Is this a desktop management issue? If yes, proceed to step 4. If no, proceed to step 3.
3. Move to appropriate team. Ed case 1
4. Assign ticket to Service Desk Technician
5. Receive ticket
6. Review ticket description
7. Verify ticket has enough information to resolve
8. Contact customer to confirm receipt of ticket and/or get more info
9. Receive email and/or call requesting more information, or informing issue is resolved
10. Customer responds within reasonable time? If yes, proceed to step 11. If no, proceed to step 22.
11. Go over customer's response
12. Research possible fixes
13. Troubleshoot and/or analyze which action should be taken
14. Within scope? If yes, proceed to step 15. If no, proceed to step 3.
15. Can technician complete the job? If yes, proceed to step 20. If no, proceed to step 16.
16. Is task needed? If yes, proceed to step 17. If no, proceed to step 20.
17. Create task in Cherwell
18. Assign to appropriate team
19. Monitor Ticket and update
20. Fix issue
21. Document ticket
22. Resolve ticket
23. Email customer to inform issue is resolved
25. Close Ticket

**End points and Durations:**

**Case 1**
Ticket is assigned to appropriate team. *(Case 1 ends at step 3, no path) (process time 6 min – no wait time)*

**Case 2**
Customer ticket is closed. *(Case 2 ends at step 25, no path) (process time between 28 min - 2 weeks and 85 min with up to ~2 weeks wait time)*

**Frequency:** Daily
**Volume:** 30 – 40

**Associated Documents and Artifacts**
- N/A

**Critical Information Inputs**
- Ticket information

**Process Improvement Opportunities** *(including applicable automation recommendations)*
- Would like to notify customer after ticket is resolved to confirm all is working
- Route servicedesk email to oisticket email box
- Reconfigure Cherwell ticketing system
- Provide checklist(s) or self-help guides on Cherwell when possible
- Questionnaire on Portal to help with categorization
- Further training

**Authority Cited**
- N/A

**Contributors**
- Scott Robinson
- Pallavi Mohapatra
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Office of Information Services (OIS) — Client IT Support Services (CISS)

Approved by: ___________________________  By: ___________________________  (Jason Piccione)

01/10/2020
**Narrative Description of Business Process**

**Trigger:** Customer has Service Desk Issue

1. Customer contacts Service Desk
2. Is this a desktop management issue? If yes, proceed to step 4. If no, proceed to step 3
3. Move to appropriate team. (Ed case 1)
4. Assign ticket to Service Desk Technician
5. Receive ticket
6. Review ticket description
7. Verify ticket has enough information to resolve
8. Contact customer to confirm receipt of ticket and/or get more info
9. Receive email and/or call requesting more information, or informing issue is resolved
10. Customer responds within reasonable time? If yes, proceed to step 11. If no, proceed to step 22
11. Go over customer’s response
12. Research possible fixes
13. Troubleshoot and/or analyze which action should be taken
14. Within scope? If yes, proceed to step 15. If no, proceed to step 3
15. Can technician complete the job? If yes, proceed to step 20. If no, proceed to step 16
16. Is task needed? If yes, proceed to step 17. If no, proceed to step 20
17. Create task in Cherwell
18. Assign to appropriate team
19. Monitor Ticket and update
20. Fix issue
21. Document ticket
22. Resolve ticket
23. Email customer to inform issue is resolved
24. Customer reopened ticket? If yes, proceed to step 4. If no, proceed to step 25
25. Close Ticket

**End Points and Durations:**

**Case 1**
Ticket is assigned to appropriate team. *(Case 1 ends at step 3, no path) (process time 6 min – no wait time)*

**Case 2**
Customer ticket is closed. *(Case 2 ends at step 25, no path) (process time between 28 min - 2 weeks and 85 min with up to – 2 weeks wait time)*

**Frequency:** Daily
**Volume:** 30 – 40

**Associated Documents and Artifacts**
- N/A

**Critical Information Inputs**
- Ticket information

**Process Improvement Opportunities** *(including applicable automation recommendations)*
- Would like to notify customer after ticket is resolved to confirm all is working
- Route servicedesk email to oisticket email box
- Reconfigure Cherwell ticketing system
- Provide checklist(s) or self-help guides on Cherwell when possible
- Questionnaire on Portal to help with categorization
- Further training

**Authority Cited**
- N/A

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Could-Be Desktop Management

Office of Information Services (OIS) – Client IT Support Services (CISS)

Approved on: __________________ By: __________________ (Jason Piccione) 01/10/2020