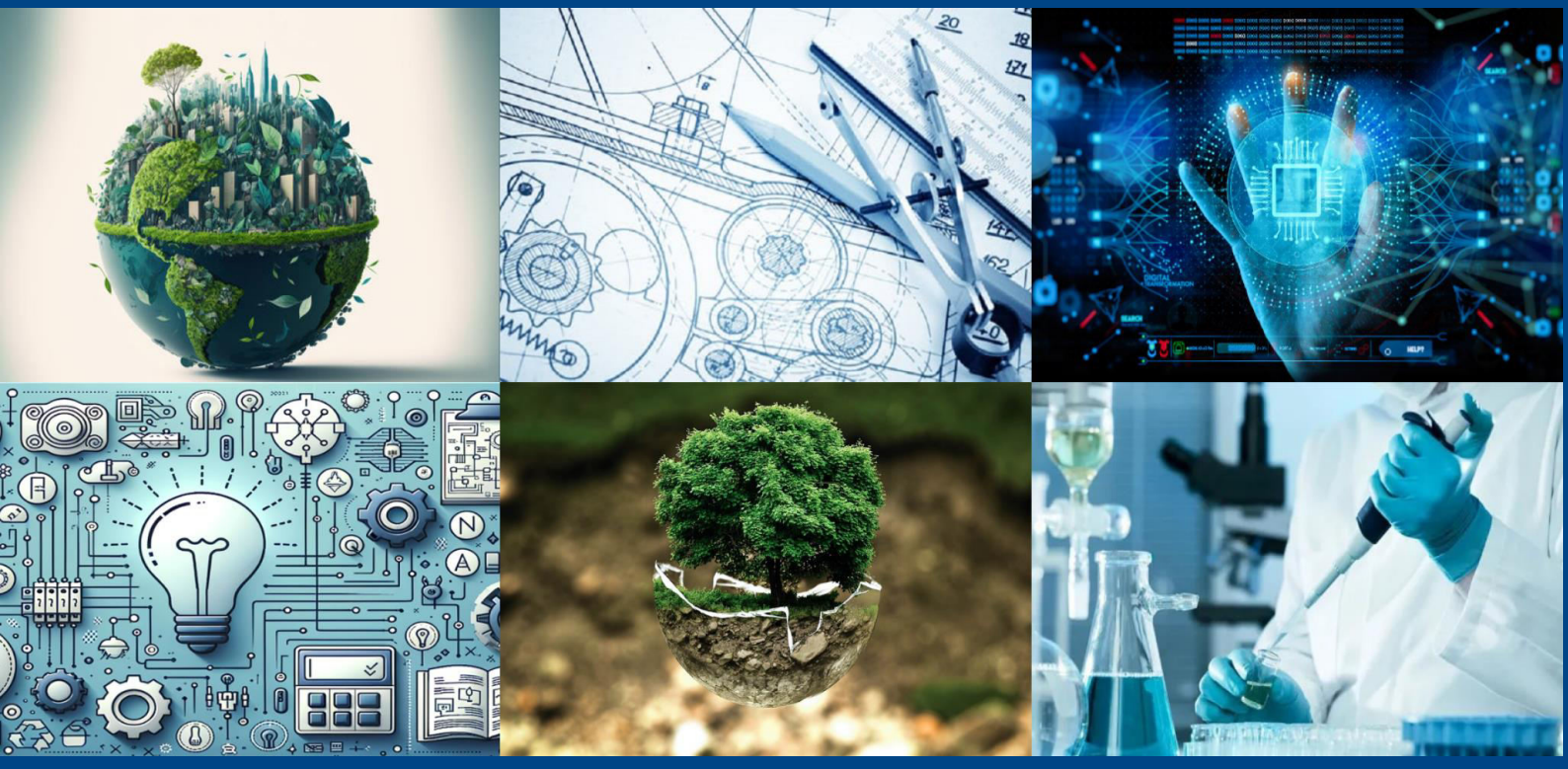
ISSN: 2582-7219

International Journal of Multidisciplinary Research in Science, Engineering and Technology

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)



Impact Factor: 8.206 **Volume 8, Issue 6, June 2025**

© 2025 IJMRSET | Volume 8, Issue 3, March 2025| DOI:10.15680/IJMRSET.2025.0803347

ISSN: 2582-7219 | www.ijmrset.com | Impact Factor: 8.206| ESTD Year: 2018|

International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

From Manual Email Tracking to AI-Driven Queues Enterprise Case Management Modernization

Sai Sidharth Sambasivan Chettiyar

Principal I Application Analyst, HERBALIFE INTERNATIONAL AMERICAS INC., USA

ABSTRACT: This article outlines the creation and implementation of a Dynamics 365 Customer Service solution, moving the manual email-based case handling of more than 1,500 Customer Service Representatives to an intelligent SaaS ecosystem. The new system automates the conversion of email to case, queue routing, enforcement of SLAs, along with real-time analytics, greatly reducing the lack of visibility (from 250 hours/month to 0 hours/month) and providing an annual ROI of $105,000. The 8-week pilot with 100 users from multiple sub-groups resulted in a 96% SLA compliance rate and an improvement in the average response time from over 24 hours to 3.2 hours and an increase in the average number of cases completed per agent per day (16.3). Important technical accomplishments include compliance with HIPAA and SOX, integration with CRM and SAP using Power Automate, and creation of other efficient routing rules. Additional plans for this new system include expanding to other channels, adding GenAI auto resolution capability, developing the ability to use data to predict the workforce requirements of the future, establishing customer service as a key asset driven by data and creating reusable reference architecture to facilitate scalable modernizing efforts for Corporations.

KEYWORDS: Dynamics 365 Customer Service solution, SaaS Ecosystem, ROI (Return on Investment), HIPAA and SOX, CRM and SAP.

I. INTRODUCTION

The case-management process involves working together from different industries (i.e., health care, social services, etc.) to assess and coordinate how to meet individual needs and improve results. The focus is around how to work more efficiently, provide care for clients based on what those clients need, and promote the client's right to make his/her own choices while linking the client to needed resources. There are obstacles that prevent case-management processes from functioning in an effective manner (e.g., caseloads are too high; resources are limited; clients resist receiving services). The result is that case managers experience fatigue, and if case managers' fatigue is not resolved, it will negatively impact the quality of the intervention being provided. Additionally, fragmented service-provision systems and poor communication systems can impair a case managers' ability to collaborate and provide continuity of care, particularly within the health care and legal services; e.g., manual processes within service systems will create data silos and lead to delays.

Although efficiencies enhance workflows and improve the ability to access information, the additional stress and time it takes to obtain access to the information outweighs any gains made because of limited resources. Client care can benefit from assessment and advocacy services, which will help clients achieve their goals and promote their independence, but case managers may experience difficulty managing clients' resistance and/or complex, overlapping needs, leading to providers unnecessarily using their services. With real-time tracking and transparency, working in a collaborative manner should eliminate communication breakdowns and conflicting roles [1].

The leading case management software programs offer significant capabilities focused on compliance, workflows, and analytics for a variety of industries that rely on case management, i.e., health care, legal, social services, and NGOs. Examples of the leading case management software programs include Clio (a law firm; client portals; mobile access); Case Management Hub (social work; customizable workflows; compliance capabilities); SimplePractice (a single platform for health care and mental health services); MyCase (for small law firms; affordable; document management); and KissA review of the features offered by different Email Case Management systems indicates important aspects of email customer service case management for organisations, such as billing, automation and client portals [2].

ISSN: 2582-7219 | www.ijmrset.com | Impact Factor: 8.206| ESTD Year: 2018|

International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

Currently, three of the most popular systems available in the market are Zendesk, HubSpot Service Hub & Hiver. All three systems offer similar functionality that an Organisation would require to implement email customer service case management, including shared inboxes (for collaboration), dashboards (to provide real-time metrics for agent performance), knowledge bases (to provide templates for auto-response), automated creation of customer service cases, and improved operational efficiency for organisations through automated responses to email inquiries/cases, tracking of agent productivity and case management efficiency. All three vendors support email-to-case automation, where incoming emails are created into a trackable case and are created without duplication and allowing collaboration between agents; as well as the availability of feature such as collision detection and internal notes. Furthermore, each vendor provides knowledge bases that organisations can use to allow for auto-responses to customers and dashboards to provide analytics on agent performance in real-time. Uses of automated email to case creation systems require that email messages be forwarded to shared inboxes; that case routing, SLA rules, and agent training related to productivity analytics are established; and that knowledge bases are available for self-service options. An organisation should also consider using integrations with CRM systems (and particularly, HubSpot) to give a comprehensive picture of the customer (in terms of context) for the life cycle of the claims process [3].

In addition to billing and integrations, pricing structures vary among email case management systems based upon user count, features, and team size. The systems also support shared inboxes, automated email to case creation, and dashboards. The pricing structure between the various vendors varies based upon annual vs. monthly billing; number of users; and additional features (e.g. AI tools). Specifically, Hiver's Lite plan is $19 per user/month; HubSpot's free plan is available for (2) two users and their Starter plan is $15 per user/month; and both systems have significantThe Standard Plan at Help Scout costs $25 per user per month and includes a free trial period. Help Scout also has clear pricing. This makes Help Scout cheaper to implement when compared to HubSpot for growing businesses. Hiver is an excellent choice for businesses that use Gmail, as they provide discounted (10-20%) pricing for yearly contracts.

For businesses that want to use email as a case and activity, integrating their email and email case with a CRM will provide many benefits: enabling tracking of service teams, automatically doing repetitive tasks, and consolidating customer data. To achieve this, businesses often use either native connectors or middleware solutions (like Zapier) to integrate their email with their CRM. The process of integrating email into a CRM usually consists of checking the compatibility of API documentation, setting up the native sync to ensure email and calendar integrations function correctly, and completing the setup for email-to-case (where emails converted to new cases are created) and using middleware for non-natively integrated email systems [4].

After retrieving the relevant email and attaching it to the case, testing the smooth flow of the data and the proper functionality of the integration must be done. Different companies have different levels of compatibility and features integrated for email case management, such as HubSpot's relatively simple native synchronization and Zoho's and Hiver's moderate levels of logging and working with mail and case data. This integration will allow all customer communication to be viewed in one place (i.e., will decrease the need for manual entry of data to a database) and significantly improve the efficiency of agents [5].

If companies add intelligent email case management to Microsoft Dynamics 365 Customer Service, they will improve operational efficiency by automatically creating cases from incoming emails using either server-side synchronization or email-to-case rules.This platform offers efficient categorisation, allocation of ownership, and in-house discussion via features such as @mentions as well as links to knowledge articles. Groups can set priorities via task queues, meet the service-level agreements of expected response times, and employ rules that enable automated processes through keyword identification and urgency indicators. Service agents can enhance their first-contact resolution rates through access to an integrated view of each case's timeline, all prior answers, suggested responses generated from artificial intelligence, templates and knowledge base content, and metrics tracked by Power Apps' dashboards or Omnichannel Admin Centers, such as time spent on handling an inquiry and customer satisfaction.

Additionally, leaders can measure case volume, compliance with service-level agreements, productivity of agents, and case trends using Power BI's AI-driven sentiment analysis and reporting tools. The ongoing analysis facilitates proactive staffing and process improvement towards achieving broad digital transformation ambitions. The implementation plan's objectives encompass establishing auto-creation rules to create new cases, setting up email servers to synchronise with the new case management application, increasing functionality and automation within

ISSN: 2582-7219 | www.ijmrset.com | Impact Factor: 8.206| ESTD Year: 2018|

International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

workflows using Power Automate and AI recommendations, and measuring performance and improvement through quantity indicators [6].

Through automation using Dynamics 365 Customer Service, email case management can be improved by setting up service queues, service-level agreements (SLAs), and routing rules. To establish service queues to manage email inquiries, users must create service queues in the Customer Service Admin Centre, specifying the service queue name, description, and auto-routing configuration. Accordingly, routing rules can be established to route cases according to a specified criteria set, thus ensuring that inquiries are efficiently routed when received by staff. SLAs identify expected response and resolution times and can be customised according to varying circumstances and must be assigned to entitlement templates or service queues. When creating cases, best practices should include regularly monitoring service queue capacity, meeting SLAs, and fully testing the entire process to verify proper routing and compliance with established regulations.

During implementation of Dynamics 365 Customer Service email case management for a mid-sized organisation, a structured 8-12 week implementation plan will be followed in order to achieve modernisation objectives. The first step will include planning and assessing the implementation; gathering information from analysing CRM data, staff performance issues and the current email processes as well as holding workshops with stakeholders to develop key performance indicators and determine appropriate licensing options.

The second phase of implementation is core configuration to create routing and automation of incoming emails, to establish the environment, and to test the system's functionality. The third phase is integration with existing CRM systems, to enhance case management through analytic functions including migrating data and incorporating tools such as Power BI, and the fourth phase is the live training and preparation of agents for the new application while launching a pilot program. The fifth phase is continuous optimisation; performance will be monitored, established rules will be refined, enhancements will be made to the knowledge base and AI capabilities. Throughout the implementation process, key deliverables and key assessment milestones will be established in order to ensure the successful implementation and subsequent productivity increases of the email case management application.

II. RELATED WORK

Focusing on Dynamics 365 Customer Service Email-based case management solutions, the research shows how automation, AI-based routing, and integration of analytics can help enhance operational modernization through multiple case studies that demonstrate how each could be performed. Regardless of the methodology used, such as with Valenhold's centralized ticketing system with self-service integration/asynchronous routing, there were some positive results from each with respect to reducing ticket closure time but also required a large investment in training agents on the use of the system, along with very little flexibility for third-party solutions due to lack of support. An example of a hybrid solution was Archidata Services' case management system that relied heavily on Power BI dashboards as well as AI-driven suggestions resulting in increased employee productivity; however, there were challenges with both licensing costs and delays in migrating data to the new solution [7].

The Chemicals Supplier's case management system relied on intelligently routing cases through queues while managing user SLAs, resulting in many manual approval processes being reduced to almost zero, but required continual administrative assistance to maintain rules. Retail use cases demonstrated the ability to provide an intelligent routing solution while managing omnichannel processing, which resulted in a better customer experience through the increased use of AI for case resolution, however there was concern for over-reliance on AI when responding to customers. Overall, these studies provide very clear benefits in terms of efficiency/productivity but also highlight the many disadvantages associated with implementing a new case management system including high costs associated with agent training; complexity and cost of implementation; and issues associated with scaling [8].

Open-source Case Management Systems (CMS) are built as self-hosted systems and utilize a RESTful API structure to integrate and provide agile case management workflows (routing and reporting). These systems are modular and built using a LAMP/LEMP development stack architecture and provide additional modular features such as email intake, queues, and dashboard displays through extensible plug-ins to support the modernization of customer service functions. Unlike Proprietary solutions such as Dynamics 365, these open source case management systems require skilled

ISSN: 2582-7219 | www.ijmrset.com | Impact Factor: 8.206| ESTD Year: 2018|

International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

DevOps resources to implement and maintain the systems.The following summary describes five open-source, key systems for managing clinic cases: Clinic Case, CiviCRM, ArkCase, SuiteCRM, and Dynamics 365. All five systems are highly customizable and provide no licensing fees or integration capabilities to assist you with the modernization of your IT-support operation. However, clinicians, outside of developers may find it challenging to fully leverage these systems due to their complex hosting and implementation requirements, coupled with their limited native AI functions [9].

While most offer email integration to convert emails into support tickets, the weak real-time analytics to track performance and excessive overhead to support basic email functions are challenges found in both CiviCRM and SuiteCRM. On the other hand, the complex networking resources and configurations to implement ArkCase can be overwhelming for smaller organizations. In contrast, Clinic Case provides an API aggregation of case modules using a modular microservices approach, enabling easy integration with other applications; however, the user interface can be cumbersome. Similar to Clinic Case, SuiteCRM, as a fork of SugarCRM, offers a robust and mature ecosystem that helps organizations transition from legacy, proprietary applications effectively. However, due to the legacy code still present in SuiteCRM, performance may decrease as a result of excessive customizations for omnichannel providers [10][11].

For organizations modernizing their customer support functions using Dynamics 365, it is recommended that you review and consider the five open-source key systems along with each of their respective strengths and weaknesses. Depending on your organization, it may be beneficial to consider the email-to-ticket conversion, shared inboxes, automation capabilities, and customizable dashboards supported by the systems as reasons to use one of the open-source key systems. You will also benefit financially from not paying for licensing costs associated with commercial software applications and by customizing your system without being constrained by the limitations of proprietary applications.Prominent options for email case management systems are osTicket with ticket resource handling and basic reporting tasks, FreeScout which is a lightweight inbox that provides multiple mailboxes along with shared templates other than the common emails, UVdesk allows for the e-commerce process to merge with analytics of the productivity aspects of the process, SuiteCRM is a full-featured CRM with an advanced reporting system along with the processes for service workflow management, and the Rocket.Chat Help Desk which can provide omnichannel communication and real-time information collaboration between employees and contractors. Those two products also provide a way to handle email-based ticket support at a minimal cost to the company because FreeScout and osTicket provide a way for companies to use automated email case creation along with shared inboxes for the majority of their email-based ticket support needs. By leveraging IT personnel to develop custom dashboards for metrics and analytics like Power BI-like functionality will help to avoid vendor lock-in while retaining core functionality [12].

Studies of the use of artificial intelligence in the architecture that supports email-based ticket case management through the use Natural Language Processing (NLP) [13] for classification, and use of hybrid models created through the use of Robotic Process Automation (RPA) and AI to provide effective workflow management of incoming email have been accomplished by several different studies. Gryka (2024) [14] looked mostly at the use of BERT-based classifiers to detect automated spam and phishing emails. He was able to accomplish this with a high percentage of accuracy; however, he faced some problems with domain-specific language in the test group. Dada et al. (2019) [15] researched and employed ensemble machine-learning models to filter email spam. They had an overall high percentage for accuracy but were also required to continuously retrain their models because of the ever-evolving nature of spam techniques.

An end-to-end data automation pipeline using RPA and AI for efficient processing of emails has been described in detail in 2022 arXiv paper [16]. However, the system has some deficiencies due to a lack of contextual understanding and the ability to adapt to continuously changing user interface (UI) changes. A white paper published by Trianz (2025) [17] has documented the use of the AWS toolkit with generative AI to categorize and prioritize emails in near real-time. Although a high degree of accuracy (high percentage of accurately identified emails) is reported, the associated cloud processing costs are predicted to be very high. Also, the accuracy of the entire process is expected to be diminished without oversight by a human user. The studies thus far give a very clear indication that the use of hybrid ML-RPA systems has the potential to greatly reduce worker workload and improve service level agreements (SLA). Additionally, the studies have shown that it is imperative that such systems continue to receive constant training and adaptability, in order to maintain the operational integrity and functionality of the system.

ISSN: 2582-7219 | www.ijmrset.com | Impact Factor: 8.206| ESTD Year: 2018|

International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

Current studies have primarily focused on using RPA-AI bots for case management within Dynamics 365 with the end goal of developing a hybrid email handling process. For example, Khare et al. (2022) described the design of an email handling bot that uses the UiPath RPA orchestrator to handle the emails and the SpaCy NLP plugin within their implementation. These components enabled the bot to handle and automatically process approximately 500 emails per hour and to provide approximately 75% automation of the email processing tasks; however, there were still some issues associated with colloquial intent categorization and email UI change adaptation by the bot. Additionally, the work performed by the IJERT (2024) [15] researchers developed an automation system that uses an RPA system in conjunction with a Random Forest Classifier (RFC) for spam detection within the emails. The RFC achieved a 92% accuracy in identifying spam emails and there was an estimated 85% reduction in human inspection time for all emails processed by the RFC; however, the system was plagued with vendor lock-in and produced a high rate of false negatives.

The IJECE (2024) conducted a study based on the use of RPA obtained through Blue Prism and machine learning using Python scripts to implement complete email processing functionality, which they estimated had an 88% accuracy for routing emails, although they estimated that the system would have problems processing emails that contained multiple languages and processes would impose additional load on the system resources. In summary, the results of the cited studies indicate that organizations that focus on open retraining within a containerized environment will reduce workloads significantly for both customer service organizations and will also enhance features similar to Microsoft Dynamics Copilot, such as suggested replies for emails and priority ranking of emails.

III. SYSTEM ARCHITECTURE

To address the challenges of traceability, visibility of case management and workload distribution, an integrated CRM with integrated Power Automate and SAP is designed. The current state of the CRM is to support over 15,000 agents by providing a Dynamics 365 Customer Service solution, thereby changing the process of managing email from a manual process to a scalable solution, requiring no more than (5) minutes per month for each agent. The integration of Power Automate with other systems will allow cases to be automatically created from all emails received by an agent, enabling the routing of cases based on both the availability of the agents and on priority. There will also be an integrated workspace created that will link all emails sent to the CRM contact associated with the email, allowing agents to quickly find all the emails that relate to that individual. The integration layer will provide synchronization of all data to/from both the CRM system and the SAP system, while following security compliance measures to ensure the protection of sensitive information in accordance with applicable data structure guidelines.

The implementation roadmap consists of (12) weeks. The first week will be used for pilot scoping, onboarding users, and establishing efficiency objectives. A rubric has also been created to measure against several areas, such as the ability to manage cases, compliance with security requirements, etc. The goal is to save agents a significant amount of time when managing cases and achieve a high level of customer satisfaction through the delivery of exceptional service. IT will also be recognized as a strategic partner and demonstrate success through a pilot program to validate scale. The detailed architecture will be constructed in a six-week period, where at the end of the first week, there will be (100) users on the pilot program that will have provisioned user licenses and had all of the required features, such as Copilot AI and user-based security set up and ready for use.

The next several weeks will focus on managing cases through a fully automated pipeline for the management of email cases, including the email case auto-creation process (Intake) and routing them to their designated agent queue, according to the required Service Level Agreement (SLA) for resolution and response. An Intelligent Automation layer will also be implemented through the use of automated Power Flows to facilitate case management and integration with the CRM. By the fifth week, the focus will shift to Data and Analytics, whereby appropriate Power BI dashboards will be established for users to monitor their performance metrics, including SLA compliance and productivity of agents. The design of the Integration Architecture will provide for the seamless interaction/interface between the various systems of Outlook, D365, and SAP.Security and Governance will be implemented in the sixth week of the build process, thus providing an end-user environment that complies with all regulatory requirements and follow appropriate Data Management policies/standards.

© 2025 IJMRSET | Volume 8, Issue 3, March 2025| DOI:10.15680/IJMRSET.2025.0803347

ISSN: 2582-7219 | www.ijmrset.com | Impact Factor: 8.206| ESTD Year: 2018|

International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

A continuous Continuous Integration/Continuous Development (CI/CD) pipeline will be established through the use of Azure DevOps to support continued development and ongoing monitoring of the achieved system. This systematic approach will provide for improved customer service business operations through Automation, Analytics, and Strong Governance as depicted by the following figure (Figure 1):

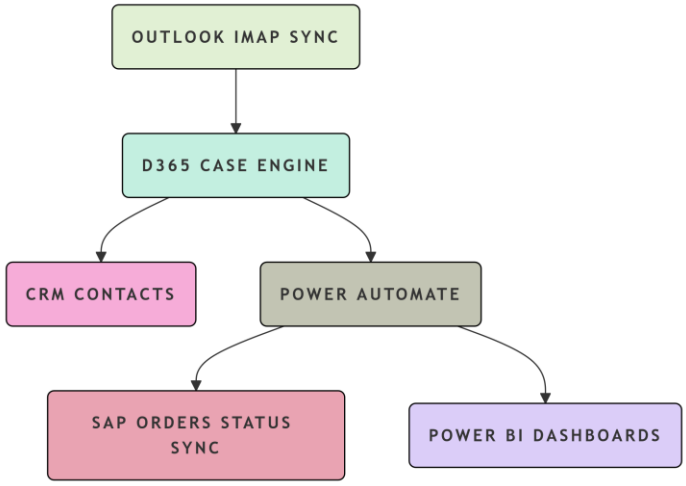


Figure 1: Integration Architecture for Dynamics 365 Customer Service

Several necessary setups are required to move from tracking emails manually through Outlook to an automated intelligent email case-processing system using Microsoft Dynamics 365 Customer Service (D365).

- The first step of this process is to create queues within the Customer Service Admin Center with distinct names and descriptions based on the level of support provided to customers. This enables emails to be automatically converted into cases and assigned to the appropriate support group based on the support tier of the customer when these steps are completed.
- The second step of this process is to set up Service Level Agreements (SLA) definitions for response and resolution times based on the customer tier to link them to entitlement templates for ongoing manageable SLA cases.
- The third layer of this process is the development of routing rules to prioritize cases according to customer status, subject line keyword matching, and fallback options for the provision of case data to agents.
- The fourth level of automation is achieved by implementing server-side synchronization (Server-side synchronization) for email processing, which will automatically create cases from emails sent from previously established contacts to the organization or based on keyword matches. Following these steps, an email checklist will be created for validation and testing within each organization to ensure the system is working correctly.
- The fifth step in this process is to configure portals and agent-type workspaces for agents using the various features available to them to increase their productivity through SLA countdowns, dashboard views, and other productivity-driving components. This "whole" system is designed to create cases automatically based on an intelligent system of routing cases, enforce SLAs for agents, provide increased visibility to executive management, and ultimately support a large number of agents while minimizing the amount of work they would have typically done manually.

Transforming emails to a single point of collection across a 1500-associate Dynamics 365 Customer Service team aims to increase the productivity of all agents, reduce the SLA compliance rate for agents to customers, and increase customer satisfaction with independent support provided through effective queue and routing management. "Best practices" recommend that customer support organizations maintain seven to ten active queues for supporting discrete tiers of support and no more than 50 cases per queue to alleviate agent workload. When case volume exceeds capacity within high-priority queues, overflow cases are routed to a supervisor queue.The method of creating rules for routing is hierarchical and uses keywords and account types to determine the routing order. In addition to the keyword hierarchy, there are some specific rules for routing cases that are based on whether the case was submitted by a VIP person or non-technical support. The performance tuning goal is to minimize slow classifications and produce quick responses

© 2025 IJMRSET | Volume 8, Issue 3, March 2025| DOI:10.15680/IJMRSET.2025.0803347

ISSN: 2582-7219 | www.ijmrset.com | Impact Factor: 8.206| ESTD Year: 2018|

International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

for all categories of cases, as well as maximize the SLA implementation for different categories of customers and produce templates for routing VIP and standard customers.

New routing strategies include routing by individual agent's capacity and routing by skilled agents, which allow the routing of cases to the agents with the least amount of workload, or the routing of cases to the appropriate agents with certain skills. The use of dashboards for monitoring is essential in maintaining SLA compliance and efficient use of agents, and routing rules are frequently adjusted based on the case analysis and volume spikes. These best practices, when followed, will result in significant improvement in routing speed, and customer satisfaction, as well as overall efficiency of routing cases, while producing significant manual hour savings and maintaining 95% SLA compliance through peak volumes.

Dynamics 365 Customer Service has advanced features for monitoring and reporting SLA compliance, as well as providing real-time information related to the implementation of a large-scale email conversion that includes 1500 agents. It also supports the achievement of 95% SLA targets while providing a minimum of 250 hours of labor savings per month. Agents are able to see live SLA timers in the workspace that provide compliance status using color codes. Ability to navigate and filter cases quickly by SLA status will assist the supervisors in identifying critical cases. Leadership has access to BI powered dashboards that refresh data daily, which include key metrics such as SLA compliance, case backlog, and average case resolution time.Breaches of the SLA will be addressed by sending automated notifications and following escalation procedures that will allow supervisors to reassign timely and communicate effectively. Compliance performance will be captured weekly in compliance reports, and that will contain both breach information and each agent's performance data. Continuous improvement will be achieved through regular reviews of SLA performance data, along with changes made based on patterns seen in that data. The monitoring platform will ultimately improve operations by providing supervisors with actionable data, agents with coaching in real time and leadership with visibility into SLA performance across the entire corporation.

The phase-out of Outlook's manual email tracking will help streamline case management through the implementation of automated case management within Dynamics 365 for Customer Service and is expected to generate approximately 250 hours per month of manual labor and achieve a 95% SLA compliance rate among 1,500 agents through this initiative. Key operational metrics include SLA compliance, case timelines and manual hours saved. Established goals for first response and resolution times will also be included in these operational metrics. Daily measures, including number of cases handled, percentage of first contact resolved and average handle time, will be evaluated to gauge the productivity of agents and maintain a low SLA breach rate is shown in below Table 1:

Metric	Target	Frequency	Purpose
Cases per Agent per Day	12-18 cases	Daily	Utilization (75-85% optimal)
First Contact Resolution (FCR)	>70%	Weekly	Quality indicator
Handle Time	<15 min/case	Real-time	Efficiency benchmark
SLA Breach Rate per Agent	<5%	Monthly	Performance ranking

Table 1: Productivity Metrics

The executive summary depicts performance against the target, illustrating a 94.7% SLA compliance rate, and indicates that there are 127 cases currently in backlog and 78% of the agent workforce is being utilized. There is anticipated substantial return on investment with this initiative with a projected annual savings of $105,000 and an anticipated increase in customer satisfaction (CSAT) by a minimum of 15% after launch.The success of the pilot phase will be based on technical verification, stability assurance, and scalability validation using specific milestones for SLA adherence and savings during an eight-week period. Group support SLA metrics will be monitored for wave overflow rates and SLA compliance across all levels of support, with a predefined benchmark for continuous improvement triggers being the automated notifications of SLA breach or backlog issues. Validation of the SLA values will include performance metrics from a pre-implementation audit and ongoing performance evaluations through a Power BI dashboard with respect to both agent levels of productivity and trends in CSAT (customer satisfaction) after

ISSN: 2582-7219 | www.ijmrset.com | Impact Factor: 8.206| ESTD Year: 2018|

International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

implementation. Ultimately, the objective is to eliminate manual processes while achieving operational efficiencies and ensuring compliance within a larger implementation of processes beyond the pilot.

The document contains a listing of the established benchmarks for customer service metrics within Microsoft Dynamics 365 for use in transforming a total of 1500 agents from tracking their email manually with MS Outlook to having all email tracked electronically using Dynamics 365 and Power BI. The benchmarks provided are representative of the industry average and demonstrate both first reaction time (the time between the initial email received and the agent responding) as well as duration of resolution (the length of time an agent requires to complete an incident). In addition, there are benchmarks associated with agent productivity and customer service experience.

Each benchmark is classified into three categories, world-class, average, and enhancement required, for the entire 1500-agent email transformation project; goals were identified for performance and achievement to these respective benchmarks. While the pre-implementation performance metrics illustrate various gaps between what had previously been established and new goals (e.g., first reaction time of greater than 24 hours, and zero SLA tracking, post-implementation goals for first reaction time will provide less than 4 hours and SLA compliance of 95%), progress through the duration of the performance metrics will be provided in numerous iterations to illustrate the stabilization of SLA compliance, decreasing first reaction time, and increasing customer satisfaction (CSAT) scores.

As of the eighth week after completing the new SLA-enabled processes, world-class benchmarks expected to be achieved during the transformation are an average first reaction time of 3.2 hours and 15.4 cases processed per agent per day. The document also provides qualitative and quantitative financial data supporting the successful completion of the pilot and the ability to scale to a broader deployment. Ultimately, the benchmarks serve as a roadmap for further enhancing the overall customer service performance and validating an ROI for Dynamics 365 by establishing best business practice through standardizing operational processes.

The data contained within the pilot program establishes the performance metrics for transforming a total of 1500 agents from tracking their emails manually through MS Outlook to utilizing SLA and email tracking systems powered by both Power BI and Dynamics 365 Customer Service metrics. During the eight-week program, the KPIs (Key Performance Indicators), including SLA compliance, first reaction time, and cases processed per agent, have demonstrated substantial performance gains, with SLA compliance increasing from 72 percent to 96 percent. The daily review of the queue health also provided helpful insights into the aging of backlogs and SLA compliance levels among all queues, identifying potential issues related to both non-compliance and escalated items.

The highest-performing agents are identified with regard to both number of cases processed per day, SLA compliance, and CSAT scores, and further analysis for backlog cases provides additional insight on SLA performance, including the fact that the vast majority of cases are in compliance, further illustrating the success of this SLA transformation while noting that a limited number of cases may approach non-compliance or may have already breached an SLA. The Power BI data visualizations include trend lines to demonstrate how SLA compliance has changed over time; comparisons of first reaction times; a radar chart to compare queue health; and bar chart(s) comparing agent performance. In addition, gauge charts to validate the overall success of the SLA transformation will provide quantitative metrics demonstrating the substantial savings from reduced manual hours, resulting in substantial savings to the organization. The executive summary data set establishes the overall success of the pilot project by demonstrating that all key performance indicators experienced improved performance trends and that the overall effectiveness of the Transformation initiative is represented below in Figure 2.

ISSN: 2582-7219 | www.ijmrset.com | Impact Factor: 8.206| ESTD Year: 2018|

International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

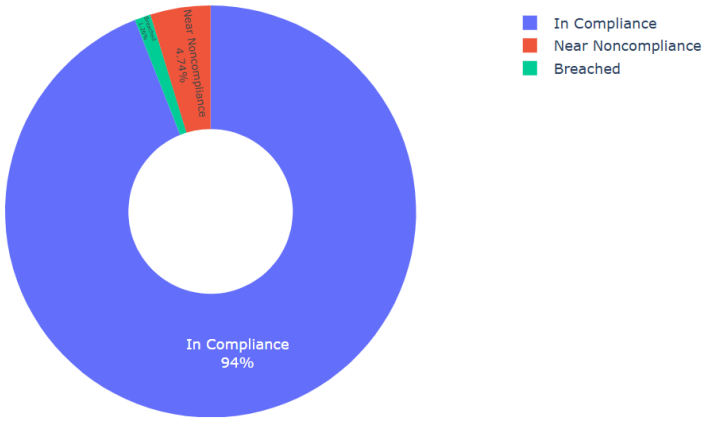


Figure 2: SLA Status Distribution

IV. CONCLUSION

Implementing an Enterprise-level SaaS-based platform that allows for real-time email tracking as part of Dynamics 365 Customer Service has dramatically improved Customer Service Operations. This program provides resolution to issues relating to Case Traceability, increases Agent Productivity, and achieves Operational Excellence through Measurement Metrics such as an average of 16.3 cases processed by an agent per day, along with an initial response time being reduced from more than 24 hours to 3.2 hours. This program creates a forecasted annual savings of $105,000 and positions Customer Support as a strategic asset with the ability to provide enterprise-level governance. Future Growth objectives include rolling out the Enterprise level solution to 1500 Agents by Q2 2026, expanding the omni-channel capabilities and enhancing the AI functionality available to the enterprise and end users. The Long-term Key Performance Indicators (KPIs) are to achieve 98% SLA compliance and provide significant savings in the number of manual hours worked by Agents. The success of the Pilot project producing greater than $1,200,000 in value will mandate that a full production deployment occur within the timeline specified; that IT is a critical partner assisting the enterprise on its way to complete Transformation.

REFERENCES

1. "Definition and Philosophy of Case Management", September 2022, https://ccmcertification.org/about-ccmc/about-case-management/definition-and-philosophy-case-management#.
2. "Top 10 Best Case Management Software in 2025", https://casemanagementhub.org/best-case-management-software-solutions/.
3. "Streamline customer support with email management software", Mozhdeh Rastegar-Panah, 2025, https://www.zendesk.com/in/service/ticketing-system/customer-service-email-management-software/#.
4. "Email Integration with OpenCRM", 3 Oct 2022, https://opencrm.co.uk/email-integration-with-opencrm-3/.
5. "Microsoft Dynamics ERP Partners Providing Comparisons and Insights", August 14, 2023, https://erpsoftwareblog.com/2023/08/understanding-case-management-in-microsoft-dynamics-365/.
6. "Automatically Route Cases to a Queue", November 6, 2017, https://carldesouza.com/automatically-route-cases-queue/.
7. "Microsoft Dynamics 365 Customer Service's Impact on Valenhold's Capabilities", https://evolvous.com/case-study/microsoft-dynamics-365-customer-services-impact-on-valenholds-capabilities/.
8. "Dynamics 365 Customer Engagement Implementation Helps A Chemicals Supplier Streamline the Workorder Approval Process", 2020, https://synoptekmark.b-cdn.net/wp-content/uploads/2020/06/cs-dynamics-365-customer-engagement-implementation-for-a-chemicals-supplier.pdf.
9. "Open Source Case Management Software: A Comprehensive Guide", 12 January 2024, https://osssoftware.org/blog/open-source-case-management-software-a-comprehensive-guide/.
10. "05 Best Open-Source Case Management Software for Your Law Firm", Sachinthi Jayathilaka, Jun 07 2024, https://worklenz.com/blog/05-best-open-source-case-management-software-for-your-law-firm/.

ISSN: 2582-7219 | www.ijmrset.com | Impact Factor: 8.206| ESTD Year: 2018|

International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

11. "Open Source Test Case Management Tools", 25/08/2019, https://codoid.com/software-testing/open-source-test-case-management-tools/.
12. "Open source Help Desk System and the Top 9 Open Source Help Desk Software", April 7, 2021, https://wpmanageninja.com/open-source-help-desk-system/.
13. "What Is the Best Open-Source Case Management Tool?", Vagisha Arora, October 21, 2021, https://www.planetcrust.com/what-is-the-best-open-source-case-management-tool.
14. "Detection of AI-Generated Emails - A Case Study", Paweł Gryka, Kacper Gradoń, Marek Kozłowski, Miłosz Kutyła, Artur Janicki, 30 July 2024, https://doi.org/10.1145/3664476.3670465.
15. "Machine learning for email spam filtering: review, approaches and open research problems", Emmanuel Gbenga Dada, Joseph Stephen Bassi, Haruna Chiroma, Shafi'i Muhammad Abdulhamid, Adebayo Olusola Adetunmbi, Opeyemi Emmanuel Ajibuwa, June 2019, https://doi.org/10.1016/j.heliyon.2019.e01802.
16. "E-Mail Assistant -- Automation of E-Mail Handling and Management using Robotic Process Automation", Arpit Khare, Sudhakar Singh, Richa Mishra, Shiv Prakash, Pratibha Dixit, 12 May 2022, https://doi.org/10.48550/arXiv.2205.05882.
17. "Intelligent Email Automation", 2025, https://www.trianz.com/themes/trianz_beta/ images/home/pdfs/intelligent-email-automation-whitepaper.pdf.

INTERNATIONAL STANDARD SERIAL NUMBER INDIA

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH

IN SCIENCE, ENGINEERING AND TECHNOLOGY

| Mobile No: +91-6381907438 | Whatsapp: +91-6381907438 | ijmrset@gmail.com |

www.ijmrset.com