

Case Study: Improving Productivity, Resident/ Employee Experience and Driving Innovation through Digital Transformation



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Categories:

- ◆ Increasing Productivity/
Reducing Labor Costs
- ◆ Improving Resident/
Employee Experience
- ◆ Driving Innovation

About the Organization

Organization Name:

United Methodist Communities

Main Contributor:

Travis Gleinig, CIO

Organization Type:

Housing with Services, Home Health/Home Care, Hospice, Assisted Living Facilities, Acute Rehab Facilities, Long-term Acute Care Hospitals, Long-term Care Rehab Facilities, Skilled Nursing Facilities, Memory Care Facility, Continuing Care Retirement Communities (CCRC)

Organization Description:

United Methodist Communities of New Jersey (UMC) is a faith based, non-profit organization with a 115+ year history of compassionately serving seniors in the state of New Jersey. UMC's mission is to provide a high-quality living environment and services that enable seniors to live with dignity, independence, and purpose.

Application Area(s)

Back-Office Operations, Clinical Care, Resident/Client Support Services, Dining Services, Customer Relationship Management

Technology/Consulting Firm Partner

NuAlg

Project Description

The Artificial Intelligence (AI) and Robotic Process Automation (RPA) Center of Excellence (COE) project supported the digital transformation initiatives of UMC by creating a centralized hub for the development and implementation of AI and RPA-powered technology. The project began with a thorough analysis of all UMC lines of business (functions) to identify areas where automation could be implemented to improve efficiency and reduce costs. Based on this analysis, a priority list of RPA and AI projects was created, targeting UMC's major operational processes with the greatest potential for cost savings and impact. The COE provides the necessary resources, expertise, and support to ensure the successful implementation and maintenance of these projects, ultimately driving digital transformation and business value for UMC.

Status Before the Project Started

Before the project began, UMC had limited experience with RPA and had only a basic understanding of the organization's critical business processes. Many processes were still being performed manually, leading to inefficiencies across various departments. Additionally, UMC's data was siloed and scattered across multiple systems making it difficult to gain a comprehensive view of the organization's performance.

Business Model

CCRC type

Planning Philosophy/Approach

The planning process for the project included a thorough and holistic analysis of UMC's lines of business to identify areas where the organization could implement automation. This analysis involved engaging numerous stakeholders and subject

matter experts across the organization to gather input and ensure that all relevant perspectives were considered.

The first step in the planning process was assembling a project team with representation from all areas of UMC. The team conducted a thorough review of the current processes across the organization to identify opportunities to automate, reduce costs, increase efficiency, and improve the staff or resident experience. UMC worked closely with stakeholders and subject matter experts to gather input on the potential impact of automation and create a comprehensive list of RPA and AI projects that would be prioritized for implementation.

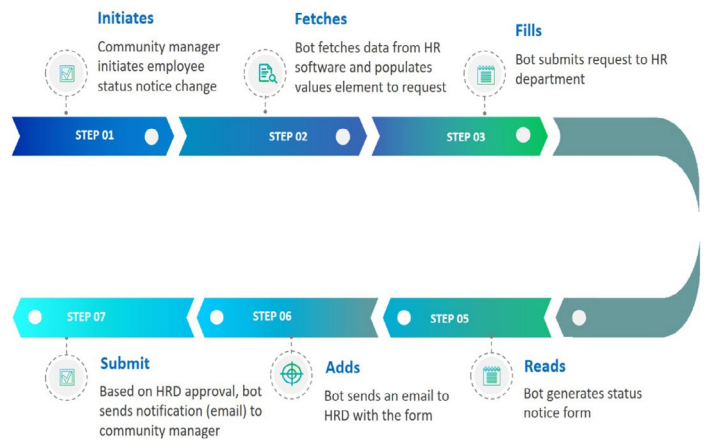
In addition, the project team also continued to engage with stakeholders and subject matter experts on an ongoing basis throughout the implementation phase to ensure that the solutions delivered met their needs and delivered the expected results.

Status after the Project and Outcomes

Increased Productivity, Improved Employee Experience, Innovation

Project 1 (from the Center of Excellence – HR function):

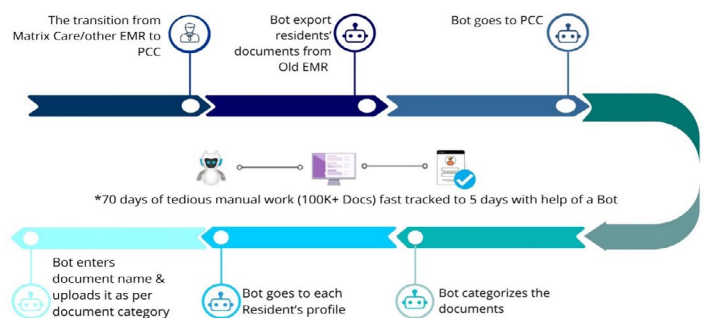
The team developed a low-code Microsoft PowerApps (RPA — Microsoft Power Automate) and integrations across our **Human Resource Management System** to drive data integrity by eliminating the need for staff to look up information from various systems for respective business process. Each step of the process is driven by approvals, which are fully integrated within the Microsoft Teams and Outlook ecosystem for a completely streamlined user experience. This integration is key to the automation process and has translated to a 75% reduction in processing time and an estimated savings of over \$250,000 in recaptured labor productivity since its implementation. Eliminating the need for employees to manually look up information also improves overall efficiency and processing time. Additionally, the low-code Microsoft PowerApps allows for easy customization and scalability and ensures we can adapt it to the changing needs of the organization.



Project 2 (from the Center of Excellence – EMR Migration):

The challenge was to transfer over 80,000 resident documents and attachments, including lab results, entrance agreements, power of attorney, and other clinical, financial, and operational documents, to the new system without losing the integrity of resident data. Since there was no native import solution for this quantity of documents, the process would have been time-consuming and labor-intensive if done manually.

To address this challenge, we conceptualized, programmed, tested, and deployed an **RPA bot in under 14 days**. The bot was designed to automate the process of categorizing and uploading the documents to the new system. The deployment of the bot was a success, and within a week all the documents were transferred to the new system, saving a significant amount of time and labor. The RPA bot was highly efficient and helped to maintain the integrity of resident data during the EMR migration process.



Project 3 (from the Center of Excellence – Data Warehouse):

The project's overarching vision was to centralize all the organization's data into a functional data warehouse. This includes performing data profiling, data quality checks, data standardization, data integration, and data warehousing. These custom dashboards are built to provide near real-time visibility into key performance indicators. By consolidating the organization's data into a centralized location, it becomes much easier for leadership and management to analyze, gain insights, and make informed decisions. The Data Project within the COE at UMC aims to leverage these benefits, providing real-time visibility into key performance indicators and allowing leaders to quickly identify areas that need improvement. Additionally, advanced analytics such as predictive modeling, machine learning, and natural language processing are being used to uncover hidden patterns and trends in the data, providing deeper insights into the organization's operations. This project will help UMC to make data-driven decisions, improve quality of care, and increase operational efficiency across the organization. These dashboards span across the domains of finance, operations, clinical services, and philanthropy.

Lessons Learned/Advice to Share with Others

- ◆ **Allocating Time:** These RPA projects are detail oriented and time-consuming. It is important to allocate sufficient time to the project to ensure that it is successfully completed.
- ◆ **Communication and Education:** These projects often involve technical concepts and processes that may not be familiar to all stakeholders. It is important to have clear and effective communication in place to ensure that all stakeholders understand the project objectives and how the RPA will be implemented.
- ◆ **Data Governance:** Ensure you have clear policies in place to protect and manage sensitive data. Involve executive leadership during the process of defining datasets, key performance indicators, and other metrics.
- ◆ **Technical and Technology Gaps:** RPA projects often require specialized technical skills that may not be present within the organization. It is important to identify and address any technical skill gaps within the team to ensure that the projects are a success.
- ◆ **Organizational change management:** Because RPA projects can bring significant changes to the way organizations work, it is important to provide proper training for employees to adapt to these changes. Failing to manage the changes effectively can be a major roadblock in adoption.
- ◆ **Test and validate:** It is important to thoroughly **TEST** and **VALIDATE** the RPA solution before implementing it to ensure it meets the requirements and works as expected and to minimize any potential issues that may arise during the implementation phase.