



LEVERAGING WORKDAY FOR EFFECTIVE COVID-19 VACCINATION  
TRACKING: INTEGRATING CUSTOM OBJECTS AND SECURITY FEATURES IN  
HUMAN CAPITAL MANAGEMENT SYSTEMS

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*Abstract*

*Employee workforce is an asset to the organization, forming the foundation of every successful business. Effective Human Resource (HR) management is crucial in ensuring employees feel safe, valued, and properly supported. The HR department is responsible for maintaining employee safety, health, and satisfaction. In the wake of the COVID-19 pandemic, as companies plan to bring their workforce back to the office and covid vaccination tracking under state and federal mandates, it is critical to track employees' COVID-19 vaccination status in the Human Capital Management (HCM) system to ensure workplace safety. This article explores the use of custom objects, fields, domains, and custom object validation for tracking employee COVID-19 vaccination status and discusses specific tools and customizable solutions offered by Workday to facilitate this process.*

*Keywords: Workday, COVID-19 vaccination tracking, Human Capital Management (HCM), custom objects, condition rules, workplace safety.*

## I. INTRODUCTION

Sir Richard Branson famously asserted, "A company's employees are its greatest asset, and your people are your product" [3]. Effective employee management is paramount, a fact underscored by the COVID-19 pandemic [10]. The coronavirus disease-2019 (COVID-19) pandemic has had a pervasive impact on societies globally [7]. To mitigate transmission in the United States, many businesses either closed or implemented nonpharmaceutical control measures, permitting only essential workers on-site [7,10]. Employers, particularly HR professionals, corporate leaders, and management staff, are ultimately responsible for adopting and implementing risk-mitigating interventions to ensure a safe and healthy work environment [2,8,9,10]. During the summer and fall of 2020, employers began formulating "return to work" strategies to reduce transmission risk among employees [2,7]. In response to the pandemic, organizations have enacted substantial workplace changes, developed new and improved operating models, and innovated ways to sustain operations [2,7,9,10].

Ensuring employee vaccination against COVID-19, or facilitating access to vaccinations, is vital for preventing virus transmission and safeguarding the health of both remote and on-site workers [2,11]. Various countries and states, such as New York in the United States, have mandated organizations to track their employees' vaccination statuses [1]. To comply with federal and state regulations and to maintain workforce and workplace safety [1], organizations



require a secure method for tracking vaccination statuses. This need is particularly critical in industries where vaccination is necessary for workers to perform their jobs or be on-site [2,11]. Organizations must support vaccine attestation and be able to report this information for internal purposes or to meet governmental validation and compliance requirements [2].

A dedicated vaccination tracking system integrated with the Human Capital Management (HCM) system is essential for providing HR teams with visibility into employees' vaccination statuses. This integration enables real-time decision-making based on current conditions and helps determine whether individual workers can return to the workplace or assess capacity for a given site, building, or floor [2,11].

## II. PROBLEM STATEMENT

With COVID-19 vaccines now available, employers are preparing for a full return to the workplace in the coming months. Initially, businesses faced the challenge of whether to request or even mandate that employees be vaccinated before returning to work. Not everyone will agree to be vaccinated for various reasons, leaving employers to find ways to protect their other employees, customers, and clients while adhering to civil rights laws. The subsequent challenge was to gather, maintain, and track the vaccination status of vaccinated employees.

However, states like New York have regulated companies to implement vaccine requirements for a safe workforce return to the workplace [1]. One of these requirements is to track and report employees' vaccination status for organizational planning and compliance with government regulations. With this data, organizations can model different scenarios on how the pace of workforce vaccination will impact other aspects of the physical environment. The vaccination rate can affect office space demand, the availability of an in-person skilled workforce, and the need for personal protective equipment (PPE) and cleaning services [2].

To meet state regulations, organizations need a system to track vaccination status while securing the data as Personal Identifiable Information (PII) to ensure data privacy. Most enterprise applications, including Human Capital Management (HCM) systems, lack functionality to collect, maintain, and report on employees' vaccination status. While small organizations might manage this data with spreadsheets, larger employers need an automated system integrated with HCM systems. Additionally, employees require a secure way to self-attest their health status, including vaccination details—such as dates and vaccine type—while ensuring their privacy is protected [2].

## III. SOLUTION

### 3.1 Workday Tools & Technology

**3.1.1 Custom Objects** - Workday provides the ability to create custom business objects to capture data unique to an organization [4]. These custom objects, which can be configured with specific security domains, can be utilized in business processes and reports. Custom objects consist of custom fields tailored to the organization's needs, allowing the recording of additional data not covered by Workday-delivered fields [4].



A custom object can be created with the following fields on non-effective dated Worker (employee) business objects:

1. Vaccine Provider
2. Date of First Dose
3. Date of Second Dose

A custom list [4] can be generated for the 'Vaccine Provider' field with predefined values such as 'Moderna,' 'Pfizer,' and 'Johnson & Johnson' for employees to select from. Additionally, custom validations can be implemented to ensure that employees enter accurate data.

It is crucial to restrict access to employees' vaccination details to HR personnel and the employees themselves. This can be achieved by securing the custom object through the custom domain [6]. The access rights for the custom object containing vaccination data will be assigned to the HR team and the employees by defining the security settings of the custom domain. Consequently, the vaccination details entered by employees will be stored in their profiles and will only be accessible by HR professionals and the employees themselves.

**3.1.2 Distribute Documents or Tasks** - Companies can use the 'Distribute Documents or Tasks' business process to distribute documents or tasks to employees in one or more organizations defined in Workday [5]. A 'To Do' item can be created with instructions [5] for employees on how to enter their vaccination details in the Workday HCM system. This 'To Do' item will be distributed to employees and will appear as a task in their Workday inbox, prompting them to take action and mark it as complete.

The following figures illustrate the configuration of the custom object for tracking vaccination details, custom validation to ensure data correctness, the setup for the 'Distribute Documents or Tasks' process, and the Employee's Inbox in Workday, which provides instructions for employees to complete the data entry in the system for tracking and reporting.

Field Label	Field Type	Prompts	Validations	Custom Validation
Vaccine Provider	Vaccine Provider			Vaccine Provider cannot be blank
Date of First Dose	Date			Date of First Dose cannot be blank
Date of Second Dose	Date			Date of First Dose cannot be later than the date of second dose

Fig 1: Configuration of Custom Object 'Covid Vaccine Tracking'



The figure above highlights the security domains controlling access to the custom object, the custom fields with their labels and types for capturing vaccination details, and the custom validations for ensuring data accuracy.

**View Distribute Documents or Tasks**

Distribute Documents or Tasks Covid vaccination details for [REDACTED]

Description Covid vaccination details

Label Override Enter your Covid vaccination details

Organization(s) [REDACTED]

Include Subordinate Organizations No

Select Role(s) to distribute to those who fulfill the roles for the selected organization(s) and/or select User(s) to distribute to a specific user(s)

Role(s) (empty)

User(s) [REDACTED]

**Tasks**

To Do Enter your Vaccination Details

1 item

Distribution Runs	Status
Covid vaccination details [REDACTED]	Completed

Distribute

Fig 2: Configuration of 'Distribute Documents or Tasks'

The figure above illustrates the 'Distribute Documents or Tasks' setup, which includes a reference to the organization for which the task will be distributed and the specific 'To Do' task that will be assigned.

Search: All Items

Advanced Search

Covid vaccination details

**Review Distribution of Documents or Tasks** Covid vaccination details

For

Overall Process Covid vaccination details:Tanvi Pattani

Overall Status In Progress

Due Date

**Task**

To Do Description Enter your Vaccination Details

Submit Save for Later Cancel

Fig 3: User Inbox in Workday showing task to enter vaccination details



**Edit Additional Data** [Redacted] [Menu Icon]

Custom Object Covid Vaccination Tracking

**Covid Vaccination Tracking**

Date of Second Dose MM/DD/YYYY [Calendar Icon]

Date of First Dose MM/DD/YYYY [Calendar Icon]

Vaccine Provider \*  
Search [Menu Icon]  
 Moderna  
 Pfizer  
 Johnson & Johnson

OK Cancel

Fig 4: 'Edit Additional Data' page in Workday used to take user input for vaccination details

Tech Team Lead [Redacted]

Actions

Phone Email Team

Summary Overview Job

**Covid Vaccination Tracking**

Date of Second Dose 08/07/2021

Date of First Dose 03/02/2021

Vaccine Provider Pfizer

Edit

Fig 5: 'Worker Profile' page in Workday including their vaccination details

After the vaccination details are entered by either the employee or the HR professional, the data will be saved on the worker's profile page in Workday. This information will be accessible only to the employee and the HR team members.



#### IV. LIMITATIONS AND FUTURE SCOPE

The custom solution discussed in this paper aims to develop a tool utilizing custom objects, fields, and the Distribute Tasks functionality in Workday to track employees' COVID-19 vaccination statuses. However, several areas require improvement. The following points highlight key limitations of this custom solution:

- **Data Validation:** The primary objective of this solution is to create a framework for the HR team to track and maintain employees' vaccination statuses in the HCM system. However, there is no mechanism for validating the vaccination data entered by employees. As a result, the accuracy of the data depends on the information provided by the employees, and HR must rely on this information for organizational planning.
- **Task Completion Monitoring:** The solution uses Workday's 'Distributed Tasks' feature to send an 'Inbox Task' to employees, prompting them to enter their COVID-19 vaccination details. However, there is no reporting or notification system in place to alert employees or the HR team about the employees who have not completed the task and are missing vaccination details in the system.
- **Data Entry Convenience:** In the current digital age, where efficient and user-friendly data entry solutions are highly sought after, employees may find it cumbersome to manually enter vaccination details into the system. The custom solution discussed in this paper does not support data entry via vaccination card scans, which can be seen as a limitation.

These limitations highlight the need for future research to develop solutions that can address these issues. Potential improvements include:

- **Data Validation Enhancement:** Implementing a process that mandates employees to upload their vaccination cards while entering details. This would enable the HR team to validate the entered data against the uploaded vaccination card.
- **Reporting and Notifications:** Configuring reports and notifications to send email alerts to employees and the HR team, informing them of missing vaccination details in the system.
- **AI Integration:** Utilizing an AI tool to automatically extract data from scanned copies of vaccination cards and upload this information into the employees' profiles in the Workday HCM system.

This solution is not only applicable during the COVID-19 pandemic but also has broader applications for industries such as manufacturing, retail, food, pharmaceuticals, and healthcare, where workforce immunization is critical for ensuring a safe workplace and healthy employees. This solution can serve as a valuable tool for HR teams to track immunization records in the HCM system, ensuring compliance with government regulations and safeguarding employee health.



## V. IMPACT

The custom solution leveraging custom objects and fields, custom validations, security domains, and the Distribute Documents or Tasks business process in Workday provides organizations with an automated system integrated with the HCM system to support vaccine tracking and reporting for planning and compliance. This solution helps organizations meet state regulations for vaccination tracking, ensuring a robust approach to vaccine management. Employee vaccination data will assist organizations in informing and gaining the trust of their workforce, making decisions, and finalizing plans for returning to the workplace [2]. It also enables the organization to report externally as required. Additionally, the vaccination details of an employee are confidential and should be secured within the system, accessible only by the HR team and the employees themselves. Since this solution is integrated with the Workday HCM system, the data is secured using custom domains that can be shared with authorized users and teams.

## VI. CONCLUSION

- **Comprehensive Solution:** Implementing Workday's customizable tools and technologies, including custom objects, fields, validations, security domains, and the Distribute Documents or Tasks business process, provides a comprehensive system for tracking and managing employee COVID-19 vaccination status integrated with HCM systems.
- **Workplace Safety and Compliance:** This solution helps organizations ensure workplace safety and comply with state and federal regulations, facilitating a secure method for gathering, maintaining, and reporting vaccination data.
- **Real-time Decision-Making:** By enabling real-time decision-making and planning, organizations can make informed choices about returning employees to the workplace while ensuring their health and safety.
- **Data Privacy and Security:** The solution ensures vaccination details are confidential and accessible only by authorized personnel, thus protecting employee privacy and building trust within the workforce.
- **Enhanced HR Efficiency:** Integrating this approach with the Workday HCM system enhances the overall effectiveness and efficiency of the HR department in managing critical health data, meeting regulatory requirements, and supporting vaccine management.

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