7 Steps to Add Agentic AI to Your HR Tech Stack

A practical guide to modernizing work without replacing your HCM



The workforce has changed, and HR's systems need to change with it. Work now spans employees, external talent, and AI agents, with business needs constantly reshaping who does what. Total Workforce Management means bringing that full workforce into view and coordinating its work around the outcomes the business needs. For HR, this is becoming central to helping the enterprise adapt and grow.

Traditional HCMs make too much of that coordination manual. They hold essential workforce records, but HR still has to piece together information from disconnected systems and move requests across departments by hand. That work slows the organization's response to change and consumes time HR should be spending on decisions that move the business forward.

Agentic AI gives HR a way to close that gap. Agents can use workforce data and policy context to carry requests through multiple steps, coordinating approved actions across systems. That makes it possible to deliver more responsive support while reducing the administrative burden on HR.

Building these capabilities doesn't require a wholesale HCM replacement. at first. Policies that have been in place for ages are now being re-considered as agents come on board. Static processes cannot keep up with so many things changing at once. Agents are good at self updating, but humans struggle.An agentic layer can use the records in your existing HCM and connect the systems needed to complete a workflow.

This guide walks through how to introduce agentic AI into your existing HR tech ecosystem and use it to improve how work gets done. These seven steps will take you from choosing a first workflow to measuring its value and deciding where to expand.

STEP - 01

Choose One Workflow Worth Improving

The strongest starting point is a recurring problem your HR team understands well. PwC's analysis of more than 300 HR subprocesses found that agents can automate or assist more than 88% of administrative HR workflows. That breadth makes choosing where to begin an important business decision: technical feasibility alone does not establish value.

A useful pilot addresses a bottleneck with enough volume to make improvement meaningful and a scope narrow enough to contain mistakes (Novaworks can help with this). Where the work follows a fixed sequence, simpler workflow automation may be sufficient. An agent becomes worth considering when requests vary and completing them requires interpreting information within defined boundaries.

Routine vacation requests in one business unit offer a manageable example. An agent could gather missing details and route requests to managers, with HR handling exceptions. Keeping sensitive leave cases outside the pilot lets the team learn before taking on work with greater consequences.

Action

Choose one workflow and record its request volume, completion time, manual handoffs, and HR effort per request.

STEP - 02

Map the Work and Assign Ownership

A worker experiences an HR request as one piece of work, even when completing it involves several teams. A vacation balance might live in the HCM, while team coverage sits in a scheduling system and approval rests with a manager. Delays at those boundaries can persist even when each system works as intended.

Mapping the whole request reveals where an agent could reduce coordination work and where it would inherit unresolved problems. If two teams disagree about which record is authoritative, connecting an agent to both won't settle that question. HR and IT need a shared view of the process, with the relevant security and policy specialists involved in decisions about access and exceptions.

That same clarity applies to the agent itself. Total Workforce Management requires ownership of delegated work: a business owner accountable for the outcome, supported by an IT owner responsible for operation. Someone also needs to be responsible for keeping the policies current and resolving cases the agent can't complete.

Action

Use AI to create maps of existing workflows and identify opportunities to reduce coordination costs. Generate a one-page AI-first workflow map showing systems, handoffs, approvers, and accountable owners.

STEP - 03

Define the Authority You'll Delegate

An agent's ability to perform an action doesn't establish its authority to do so. Checking a vacation balance and approving time away carry different consequences, even if both are technically straightforward. Defining the agent's role much as you'd define a job's responsibilities makes those distinctions explicit.

Authority should reflect the consequences of error and how easily an action can be corrected. A bounded task may proceed automatically, while a consequential decision requires review. For the vacation pilot, that division could look like this:

Human review is useful only when the reviewer has the information and authority to intervene. A manager needs the relevant policy and source data, with the workflow waiting for approval before it proceeds. Permissions enforced by the connected systems provide a further boundary: instructions telling an agent to stay within its role are insufficient if its actual access allows more.

Action

Write an authority matrix for the pilot, including actions the agent must never take.

Action	Agent authority	Human role
Check a balance and route a request	Act within defined access and routing rules	Review exceptions and monitor results
Approve a vacation request	Prepare a recommendation and wait	Manager reviews the evidence and approves or declines
Handle a policy exception or sensitive leave case	Refer the case to HR	Authorized specialist decides how to proceed

STEP - 04



Connect the Necessary Systems and Data

Keeping your HCM works only if the agent can reach the information it needs through controlled connections. APIs, the interfaces through which systems exchange data or request actions, can provide that access.

A connection needs to preserve the meaning of the data it carries. If a balance is recorded in hours in one system and days in another, an incorrect mapping could produce a plausible but wrong answer. A designated source of truth for each record helps prevent conflicting information from driving an action.

Access also needs to match the assignment. A vacation agent may need a worker's balance and applicable policy, but unrelated medical or compensation records add exposure without helping it complete the task. Limiting what the agent can see and change makes its authority enforceable. Licensing and implementation costs belong in the initial assessment, because the effort to connect a workflow affects whether it's a sensible first investment.

Action

List each required data source and permitted update. Review access and ownership with IT, and estimate the cost.

STEP - 05

Design the Path From Request to Completion

A connected system can still leave employees chasing their own requests. Integration makes information and actions available; orchestration turns them into a complete workflow. That distinction matters because the value to the worker depends on reaching an outcome, not simply receiving an answer.

For a vacation request, the agent could check the balance and approved policy, ask for missing details, then route the case to the manager. Following approval, the workflow updates the designated record and sends the required notifications. Each handoff has a purpose in completing the request.

Exceptions reveal whether that coordination holds together. An unavailable manager should lead to an authorized escalation path; conflicting records may require HR review. Passing the context along with the case avoids making the worker explain everything again. A clear route to HR also gives people somewhere to turn when the service can't help. Workers need to understand where AI is involved, while approvers need training to evaluate its work.

Action

Walk through a normal request and an exception with the people who will use and supervise the workflow. The key here is to identify the human-in-the-loop who will oversee and orchestrate the agentic workflows.

STEP - 06

Test Safeguards and Recovery Before Launch

A successful demonstration shows that an agent can complete a task under the conditions presented. Readiness for live use also depends on how it behaves when those conditions change. An outdated policy or unavailable system can turn a routine request into a case that needs human attention.

Testing should establish whether the agent respects its boundaries under pressure, including requests for another worker's private information or messages designed to make it skip approval. Comparable requests also need consistent treatment across the workers in the pilot. A protected audit trail of the information used, approvals, and resulting actions lets reviewers investigate what happened, with access and retention rules for sensitive data.

Recovery deserves the same attention as prevention. If a vacation record updates but the notification fails, repeating the entire workflow could duplicate the change. A tested recovery path completes or corrects the affected work safely. Named people need authority to pause the agent and authorize a restart, with a manual route available during the interruption. That preparation keeps an agent failure from leaving workers without support.

Action

Run a failure drill with HR and IT to confirm that people can take over while the agent is paused and restore service safely.

STEP - 07

Measure Results and Expand Deliberately

A pilot needs to capture learnings about workflow optimization(s) and re-design as well (mentioned above) to show whether the workflow improves as a whole. Faster responses have limited value if HR spends more time correcting the results. A baseline makes that tradeoff visible through completion time and staff effort, alongside error rates and worker feedback. The investment also includes setup and ongoing oversight, as well as software usage, training, and maintenance.

Completed outcomes tell only part of the story. Repeated blocked actions can signal that an agent is attempting work beyond its role, even when controls prevent it from succeeding. A growing exception backlog may reveal that the service is shifting work to HR faster than people can resolve it. These early indicators help the team intervene before problems grow, using agreed thresholds for pausing the pilot.

Expansion requires more decisions about delegated authority. A workflow that works for employees in one location may need different rules for contractors or another region. Each extension warrants a review of the applicable policies and permissions. Agent access also needs to change with its responsibilities and end when the agent is retired. This is how a successful pilot becomes a foundation for managing your total workforce.

Action

Agree how you'll judge the pilot's success and what would cause you to stop it. Set a review date before launch.

Before your pilot goes live

- One defined workflow, worker group, and baseline.
- Named business and IT owners, with people ready to handle exceptions.
- Approved data access, decision rights, and human approval points.
- Tested failure scenarios, audit records, and a manual fallback.
- Clear success measures, stop conditions, and a review date.

How Novaworks can help

Novaworks is an AI-native Core HR operating system for Total Workforce Management, built on ServiceNow. It brings together people, processes, and AI agents across the enterprise. Explore how Novaworks approaches workforce modernization and discuss which capabilities fit your existing HR stack.

Learn more about Novaworks: **novaworks.ai**