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Radio Frequency Goods Receipt Without Handling Units: A Mobile-Integrated Execution Architecture For SAP Extended Warehouse Management

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Abstract
Standard SAP Extended Warehouse Management (EWM) Radio Frequency (RF) goods receipt processes impose two persistent constraints on high-throughput warehouse operations: a mandatory requirement to create Handling Units (HUs) for every inbound delivery and a design limitation that restricts processing to one line item per transaction. For facilities handling large volumes of purchase orders with multiple partial shipments, these constraints generate substantial processing delays, inflate labor costs, and introduce avoidable complexity. This article presents the architectural design and operational outcomes of a custom RF goods receipt solution that eliminates HU creation and enables purchase order-referenced, multi-delivery receiving on Honeywell Movilizer-equipped handheld devices. The solution retrieves all open inbound deliveries against a scanned purchase order, conditionally navigates to single or multiple delivery views, supports line-item editing with visual status indicators for serialized and inspection-flagged materials, and triggers put away warehouse tasks automatically upon goods receipt confirmation. Integration of quality inspection Usage Decision capture within the same RF workflow removes the need for separate transaction execution. Implementation evidence indicates a 15-30% reduction in inbound processing cost per unit, measurable gains in goods receipt completion rate per hour, and reduced operator training requirements. The demonstrated design principles – purchase order-driven receipt, conditional display of data, and mobile first execution – provide transferable templates for digitizing warehouse management systems in industrial settings.

Keywords: SAP Extended Warehouse Management, Radio Frequency goods receipt, handling unit elimination, mobile-integrated execution, purchase order-referenced receiving, warehouse process digitization, inbound logistics

1. Introduction

Modern industrial warehouses - particularly those supporting refinery operations, terminal logistics, and heavy-maintenance supply chains - process thousands of inbound material movements each day. The velocity and accuracy of goods receipt directly determines downstream throughput: delayed receiving creates queues at docking stations, defers putaway task execution, and stalls inventory availability for consumption against plant maintenance orders and project work packages [1]. Over the past decade, Radio Frequency (RF) handheld technology has become the primary medium through which warehouse operators interact with enterprise warehouse management systems in real time, replacing paper-based receiving with scan-and-confirm workflows that reduce manual data entry and accelerate document posting [9].

SAP Extended Warehouse Management (EWM), the leading platform for enterprise-class warehouse execution, includes a native RF framework that supports a broad range of inbound, outbound, and internal warehouse transactions on handheld devices [3]. However, the standard SAP EWM RF goods receipt process imposes two functional constraints that significantly limit its suitability for high-volume receiving environments. First, the standard process mandates the creation of a Handling Unit (HU) for each inbound delivery before a goods receipt can be posted. Handling Units are logical or physical container structures used within EWM to group materials for storage and transfer; while they serve an important function in certain warehousing contexts, their creation introduces additional steps, requires configuration, and adds complexity that is unnecessary when goods are received in bulk or palletized downstream [5]. Second, the standard RF framework processes only one delivery line item per transaction session, requiring the operator to cycle through the interface repeatedly for multi-item deliveries - a design that was adequate for lower-volume environments but becomes a throughput bottleneck at scale [1].

Research into mobile-integrated warehouse execution systems has grown substantially alongside the broader digitization of industrial operations [2]. Studies examining RF-enabled warehouse management consistently identify process step reduction and interface simplification as the primary levers for throughput improvement and error reduction [10]. Yet the specific challenge of HU-free, purchase order-referenced inbound receiving within EWM - a scenario common in plant maintenance-intensive industries where non-stock materials are received against cost objects without a need for formal handling unit management - remains underexplored in the published literature. The gap between what the standard platform offers and what high-throughput industrial sites require creates a practical imperative for custom solution design.

This article presents the architectural design, process logic, and operational performance of a custom RF goods receipt solution developed to address these limitations. Built on Honeywell Movilizer, a cloud-based mobile enterprise application platform deployed on Honeywell handheld scanners, the solution enables warehouse operators to scan a Purchase Order (PO) number, retrieve all associated open inbound deliveries in a single query, select and process individual deliveries with full line-item visibility, post goods receipts without creating Handling Units, and trigger putaway warehouse tasks automatically - all within a single, consolidated RF workflow. Quality inspection outcomes are captured through an integrated Usage Decision sub-menu accessible by scanning a barcode from the inspection lot label, eliminating the need to exit the receiving workflow for inspection-related postings.

The remainder of this article is organized as follows. Section 2 examines the functional limitations of the SAP EWM standard RF goods receipt process in depth. Section 3 presents the architectural design of the custom HU-free solution. Section 4 describes serial number management and quality inspection integration. Section 5 details the end-to-end process execution flow and system integration points. Section 6 presents performance outcomes and operational impact evidence. Section 7 discusses broader implications for warehouse digitization strategy. Section 8 concludes with a synthesis of contributions and directions for further investigation [21].

2. Functional Limitations of Standard SAP EWM RF Goods Receipt

The SAP EWM RF framework operates through a transaction-layer architecture in which handheld devices connect to EWM via the RF framework, executing predefined warehouse process codes and interacting with the EWM core through function modules and Business Application Programming Interfaces (BAPIs). Inbound delivery notifications are created in the SAP ERP (now S/4HANA) backend with reference to purchase orders and distributed to EWM for receiving processing [8]. The standard RF goods receipt transaction retrieves these inbound delivery documents, guides the operator through item-level confirmation screens, and posts the goods receipt in the EWM system. Central to this standard flow is the requirement to create a Handling Unit - a structured data object representing the physical packaging or container in which goods are received - before any goods receipt posting can proceed [3].

The HU creation mandate introduces several operational inefficiencies in environments where packaging management is either unnecessary or handled at a later stage. Operators must navigate additional screens to define HU types, assign materials to units, and confirm unit configurations - steps that add between two and four extra RF interactions per delivery transaction depending on configuration. For a warehouse receiving hundreds of inbound deliveries per shift, this overhead translates to substantial cumulative labor expenditure with no compensating operational benefit [5]. The problem is compounded when materials are received directly for immediate consumption against plant maintenance orders or project cost objects, where neither storage-unit tracking nor downstream picking by HU is required. In such cases, the HU exists solely to satisfy the receiving process rather than to serve any functional inventory management purpose.

The single-line-item processing constraint amplifies throughput limitations further. In supply environments characterized by partial shipments - where a supplier fulfills a multi-item purchase order across several separate deliveries - the standard RF GR process requires the operator to navigate to each inbound delivery individually and process one item at a time per session. A ten-item delivery with five items carrying serialization requirements and three carrying quality inspection flags may require the operator to execute fifteen or more individual RF transaction cycles. Across a receiving dock processing fifty such deliveries per day, the cumulative impact on labor productivity and truck turnaround time is measurable [1].

Table 1. Functional capability comparison between SAP EWM standard RF goods receipt process and the custom HU-free solution. Source: Author's primary research data.

Capability	SAP EWM Standard RF GR	HU-Free Custom RF GR Solution
Handling Unit creation	Mandatory for all inbound deliveries	Not required; bypassed by design
Items per transaction	Single line item per session	All line items on selected delivery
PO-level retrieval	Not natively supported	Full retrieval of all open IBDs for a PO
Multi-delivery PO	Manual navigation per delivery	Consolidated list with operator selection
Putaway initiation	Separate step required post-GR	Automated WT creation on GR confirmation
Serialised item handling	Standard serial capture only	Visual flag + uniqueness validation
Inspection integration	Separate transaction required	Embedded UD capture with barcode scan
Training complexity	High - multiple screens and steps	Reduced - single streamlined flow

They are especially problematic in industrial sectors, such as refineries, chemical process plants and utilities, with wide-ranging warehouse operations, where the volume and variety of the goods received require that the receiving processes are as lean and efficient as possible, as they directly impact the ability of the organization to function. Delays also propagate through the supply chain through the putaway queues, the inventory availability timelines and the maintenance or project work orders queued for the materials. This means that the operational case for a re-engineered, HU-less RF GR solution is not just a matter of convenience but also one of reliability with respect to critical industrial infrastructure [22].

3. Architectural Design Of The HU-Free RF Goods Receipt Solution

This custom application is implemented as an RF program utilizing Honeywell Movilizer which is a cloud based mobile enterprise application platform (MEAP) for the development, deployment and management of RF and mobile apps on Honeywell handheld scanner devices [9]. Movilizer exchanges real-time data with SAP EWM through a cloud middleware layer. It can invoke EWM function modules and read ERP database tables without the device being directly connected to SAP. This architecture decouples the application logic from the EWM transaction layer, enabling a PO-centric receiving process that bypasses HU creation while maintaining the integration with EWM inventory management and warehouse order management [3].

Table 4. Solution architecture components and their integration points. Source: Author's primary research data.

Component	Description	Integration Point
Honeywell Movilizer platform	Cloud-based mobile enterprise application platform for RF app	SAP EWM via real-time middleware

	deployment and device management	
Handheld RF scanner	Honeywell scanner device running the custom GR application	Movilizer client on device
SAP EWM RF framework	Extended Warehouse Management RF transaction layer receiving custom application calls	BAPI/function module calls from Movilizer
LIKP table query engine	Custom program querying SAP Deliveries Header table for open IBDs against a given PO and plant	SAP EWM database layer
Putaway WT auto-trigger	Post-Processing Framework (PPF) action or custom BADI triggering warehouse task creation on GR confirmation	EWM warehouse order management
Inspection UD module	RF sub-menu for recording Usage Decisions against inspection lots; triggered by barcode scan of lot label	SAP QM inspection lot processing
Serial number validator	Custom validation ensuring manufacturer serial numbers are unique per line item at time of GR posting	EWM serialization master data

The functional heart of the architecture is the PO-entry and delivery retrieval mechanism. When the operator scans or manually enters a PO number into the RF device, the system searches the SAP Deliveries Header table (LIKP) for any open inbound delivery documents with the relevant PO number and the operator's assigned plant. In order to prevent posting the same receipt for a particular delivery multiple times (due to re-processing of posted documents), only deliveries with an open processing status will be returned from the dialog [7]. In addition, the application will perform conditional navigation based on the returned result. If one open inbound delivery is returned, the application will navigate directly to the delivery line-item screen, without presenting a selection from which the operator must choose. However, if there are multiple deliveries (which is usually the case with a partial delivery), the operator is shown a list of deliveries, and selects them one at a time to indicate which shipment they are receiving.

The delivery line-item display screen shows all line items for a delivery. The line_qty fields default to the expected received quantity, but the user can change them. To avoid human error, some items requiring special handling, such as serialized items and items requiring quality inspection, are marked in dark green font against a light green background and red font against a yellow background, respectively. These warnings remind users that an inspection obligation applies prior to posting. This dual visual encoding reduces both the operator workload and the requirement for operators, who are not material-level configuration specialists, to be able to recognize special handling requirements [6]. The operator can select any line item, use a touchscreen or keypad to set the quantity to that of the actual physical receipt, optionally enter a serial number, and acknowledge inspection flags prior to posting.

If the user presses the F2 Post function key for goods receipt after selecting a line item on an inbound delivery, the goods receipt for the selected inbound delivery line items is posted without a Handling Unit in both SAP EWM and the connected ERP system. Putaway warehouse tasks for the received goods can then be automatically created by a customized PPF action or Business Add-In (BAdI) triggered action that places the receipt items in the respective storage bins without user intervention or an additional putaway transaction. An important operational advantage of inbound processing in EWM is the elimination of the time lag between the posting of goods receipt and the creation of a putaway task if inbound processing is decoupled from putaway [5].

4. Serial Number Management and Inspection Integration

When multiple serial numbers are required for a materials item being serialized, the RF solution provides a serial number capture routine, accessed from the delivery line item screen via a function key or button. The operator navigates to serial number entry, where all the serial numbers related to the line item are displayed. The manufacturer serial numbers are validated against existing EWM serialization for uniqueness at the point of data entry by the operator. With inline validation, if the serial numbers are the same as existing numbers loaded in the system, an error message is automatically displayed to the operator, before they post the goods receipt. Thus avoiding costly and time-consuming rework to correct serialization errors after posting the documents[8]. The dark green font on light green background used to display the serialized items on the main line-item screen prevents operators from skipping the step for serial number entry for materials requiring it when completing line items.

Where an item on a purchase order line is subject to incoming quality inspection (Q-flag, as displayed on the delivery line-item screen), the RF Solution supports the recording of the Usage Decision (UD) against the resulting SAP QM inspection lot, from within the inbound receiving menu. Upon posting the goods receipt, the operator selects the “Goods Receipt Inspection” sub-menu option and scans the barcode on the label of the inspection lot affixed to the received goods. This ensures the retrieval of the record for the inspection lot without the possibility of an error in the manual entry of the inspection lot number [13]. The quality technician or quality engineer audits the part to the appropriate inspection plan and records the pass/fail result to the material handler. The material handler then enters the UD into the RF device. By default, the number received is assumed to be equivalent to the number passed. If there is a partial rejection, the operator enters the rejected quantity and the accepted quantity is adjusted.

Subsequent movements are triggered through UD posting and carry materials to specific stock types in the EWM. The transferred quantities are placed in unrestricted-use stock for further picking and consumption postings on demand. Failed quantities are placed into blocked stock at the configured quarantine bin location (QUAR-QUAR-BIN) to allow them to be returned to the vendor or scrapped. Because this movement is stock based, it bypasses follow-on processes through SAP GUI transactions and does not require the operator to leave the RF device. This results in a shortened inspection closure cycle time, as well as reduced administrative activities by quality and warehouse staff. The approach is intended to enable a lean materials inbound process through more efficient and integrated quality assurance embedded in the receiving RF process rather than as a stand-alone or post-receiving activity, which can be particularly important in a maintenance-critical context where received materials have to be available for consumption as quickly as possible [15].

5. Process Execution Flow and System Integration

The end-to-end scenario is based on a linear decision-branching flow. It involves few operator interventions and maximum control over each receiving event. The operation starts when the operator selects the Inbound Process category in the RF main menu and selects the Goods Receipt for PO option. The selection is then confirmed. On the next screen, the operator scans or keys in the purchase order number and presses OK. The system searches for open inbound deliveries linked to the purchase order. The system displays the line item screen if it found only one delivery or a delivery list screen if more than one delivery was found. After a delivery is chosen, the user checks and adjusts the line item quantities if needed, navigates to the serial number or other details screen as required and presses F2 Post to make the goods receipt posting. The user is asked to confirm the posting. A GR document created success message appears. Figure 1 (Flowchart 1) shows the entire decision and operation sequence in flowchart form.

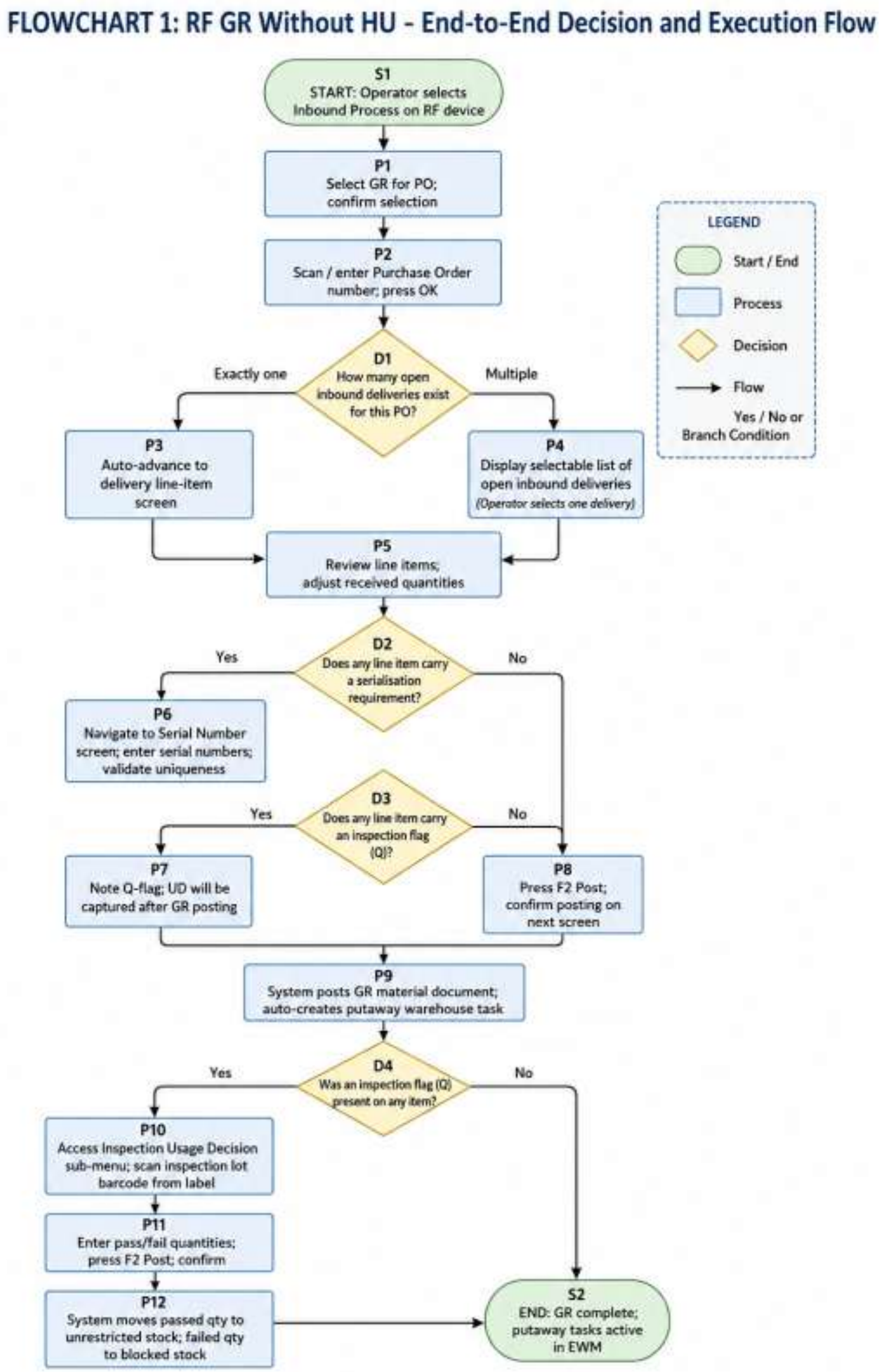

Figure 1: Flowchart of RF GR Process

Table 2. End-to-end RF goods receipt process execution steps for the HU-free solution. Source: Author's primary research data.

Step	Action by Operator	System Response
1	Select Inbound Process from RF menu	Displays inbound sub-menu
2	Select Goods Receipt for PO; confirm	Opens PO entry screen
3	Scan or enter Purchase Order number; press OK	Queries LIKP; retrieves open IBDs for the PO
4	Select desired inbound delivery from list	Auto-advances if single IBD; list displayed if multiple
5	Review line items; adjust received quantities as needed	Displays items with serialization and inspection flags
6	Navigate to Serial Number or Details screen if prompted	Validates uniqueness; assigns serial numbers
7	Press F2 Post to confirm goods receipt	Posts GR material document; triggers putaway WT creation
8	Confirm posting on next screen	Displays success message; GR document updated in EWM
9	Access Inspection Usage Decision if Q-flag present	Retrieves inspection lot via barcode scan; records UD
10	Post UD with pass/fail quantities; confirm	Moves passed qty to unrestricted; failed qty to blocked stock

At system level, this filtering takes place in three steps: filtering at the database level by the reference number of the PO, the plant code and whether the delivery is still open (table LIKP). This ensures that only the deliveries relevant to the current receiving event and physically assigned to the operator's site are returned. Where necessary, plant-based scoping is used in multi-warehouse scenarios, whereby a purchase order delivery is distributed across multiple receiving locations [7]. In the EWM processing layer, the goods receipt posting calls the standard EWM GR function module, but suppresses the HU creation call from the function module either through configuration or a custom enhancement, and can subsequently complete the posting without an HU object dependency. The BAdI/PPF action is invoked in the warehouse order management level and activated when the goods receipt transaction is posted and when putaway orders for the warehouse tasks are created for every posted item depending on the search and selection logic for the storage types and bins for the relevant warehouse and material type [5].

Multi-item and partial-shipment handling are some of the more difficult parts of the design for the solution. If a single purchase order results in five, ten, or more inbound delivery documents over a multi-week supply cycle, the operator needs a reliable way of determining which shipments have been received, which ones are open and which ones correspond to the physical delivery at the dock. It is supplemented by an open-status filter in the LIKP query which prevents already posted deliveries from being eligible for processing again. The per-delivery sequential processing model (which means that the operator chooses and processes only one delivery at a time) lends itself to easy auditing and prevents partial quantities from being mixed and matched across delivery documents with a single posting action. These design choices align with the principle that warehouse automation should reduce mechanical effort, while preserving operator oversight and documentation [2].

Cloud-based architecture of the Honeywell Movilizer platform allows the application to be deployed to multiple warehouse sites. With the use of the Movilizer platform, no software is required to be installed at the warehouse site, nor does additional server provisioning have to be performed. Modifications to the application are centrally deployed upon the next device synchronization, thereby reducing maintenance overhead of coordinating multiple application versions at different warehouse sites [20]. This ties back to the scalability of a single application for refineries, terminals, and research and development warehouse environments, with similar inbound receiving processes, but potentially different plant layouts, mix of materials, and regulatory environments [3].

6. Performance Outcomes and Operational Impact

The impact that the implementation has on each of the design objectives can be verified by the benefits obtained by the implemented solution. The inbound handling costs per unit could be reduced by 15 to 30% due to fewer RF screens per transaction, no HU creation tasks, automatic creation of putaway tasks, and fewer operator errors (Author's main research data). Cost per unit is decreased through improved efficiencies in direct labor person-minutes per goods receipt event, indirect labor error correction activity, training costs per new operator, and receiving dock throughput. Inbound Deliveries Processed per Hour, Goods Receipt Completion Rate per Hour, and Total Inbound Warehouse Tasks Completed per Hour reflect the net effect on the receiving operation of the efficiency step-level improvements (Author's primary research data).

Table 3. Operational performance metrics comparison between the standard and HU-free RF GR processes. Percentage-based metrics derived from Author's primary research data; qualitative assessments based on implementation observation.

Key Performance Indicator	Standard RF GR Process	HU-Free Custom RF GR Solution
Inbound processing cost per unit	Baseline (100%)	15-30% reduction (Author's primary research data)
RF screens navigated per GR session	6-8 screens (avg)	3-4 screens (avg)
Inbound deliveries processed per hour	Baseline	Measurably higher throughput
Receiving errors (mis-scan / wrong HU)	Present - manual HU entry step	Eliminated - HU creation step removed
Truck turnaround time at dock	Extended by HU + sequential item steps	Reduced by consolidated delivery selection
Operator training time (new hire)	Higher - multiple sub-transactions	Lower - single unified flow
Quality UD integration	Separate transaction required	Embedded in RF menu; barcode-scan lot access

Alongside these quantitative benefits, there are qualitative improvements in the process. For example, the number of RF screens an user has to page through and interact with for a single goods receipt is reduced from an average of six to eight screens during the standard process to three to four screens for the custom process, decreasing the likelihood of erroneous selections and navigations. Time to train new warehouse workers on goods receiving may be reduced, since the custom solution is designed to have each worker perform a linear sequence of operations at decision points, rather than learn repetitive isolated transaction sequences for different types of delivery. Faster truck turnaround time in receiving docks is possible due to a lower per-delivery processing time, since carriers spend less time awaiting completion of receiving formalities.

The results are consistent with findings in the mobile-integrated warehouse execution literature. With regard to warehouse management system (WMS) mobile applications, researchers found that the important design dimensions to improve throughput and accuracy are user interface simplification, transaction time reduction, and real-time feedback provision [10]. The visual encoding system used in the custom solution (i.e., color coding of serialized and inspection-flagged materials) is also consistent with the body of human-computer interaction research into industrial mobile devices, where this type of visual distinction reduces cognitive load and error rates in fast-moving operational conditions [6]. Another contributing factor to reduced fragmentation is the embedded inspection of quality UD workflow, which spares operators from navigating to separate RF menus or system transactions for what is functionally the same single receiving event.

As a result, the ERP system's solution can be deployed to both refinery, chemical terminal, industrial research and development warehouse and utilities without requiring a full redeployment of the core application to a particular warehouse operating model. This is because site-specific requirements such as plant code, storage type search sequences, inspection plans and warehouse process type allocations can be specified entirely outside of the RF application's code in EWM configuration, allowing the same RF application to function across different warehouse operating models in the same enterprise landscape. As a consequence of flexibility and centralized deployment of the Honeywell Movilizer platform, the benefits of the operations of the solution are proportional to the number of warehouse sites where the solution is deployed, while the cost of the applications is shared by all deployments [3].

7. Digitization of Warehouses and Broader Benefits

The removal of Handling Units from the inbound receiving process has advantages beyond those outlined in Section 6. The administration of HUs in warehouse systems leads to inventory carrying costs. This includes costs for maintaining HU master data, costs for performing HU-related warehouse tasks and costs for managing HU lifecycle events like HU creation, change and deletion. Where HUs have little to no function, or are simply a conveyance mechanism (such as in a straight-through process where material receipts are moved directly to consumption without container-level tracking), mandatory HU creation is process waste. This wastes system resources, operator time, and data storage for no increase in inventory visibility. Disallowing mandatory HU creation improves receipt throughput, simplifies the warehouse data model, removes the complexity of master data governance, and eliminates potential data inconsistencies within misconfigured HU master data [17].

The supply chain and social effects of improved inbound material flow reliability for maintenance-intensive industrial facilities is meaningful. For example, refineries, power producers and chemical process plants depend of the reliability of the uninterrupted flow of material so that planned and unplanned maintenance tasks can be carried out to a timetable. Delays to inbound materials can lead to maintenance delays, and reduced plant reliability, which in extreme cases can mean production stoppages with meaningful financial and social consequences [15]. Higher-performing receiving systems with a lower risk of an error occurring, and requiring less labor, contribute to the reliability of the maintenance supply chain and the operational reliability of the industrial infrastructure upon which communities depend [19]. A further environmental benefit of reduced manual labor in warehouse receiving systems is minimizing the physical and mental demand on warehouse operators and providing less physically and mentally demanding warehouse jobs for workers [11].

The best-practice design patterns described in this possible solution, namely purchase order-centric receiving, conditional display logic based upon query result cardinality, quality control integrated within the normal flow-of-work and mobile-first execution eased through cloud-based application provisioning, are also reusable for many different warehouse management system digitizations [16]. Where industrial companies are migrating to modern cloud and on-premise EWM systems from established, legacy warehouse management system platforms or extending their existing EWM system landscapes to accommodate new site types or material categories, the architecture described in this article is suitable for reuse to eliminate some of the underlying complexity while ensuring continued compliance with the documentary integrity and audit trail required for regulatory and financial settlement [18]. In outbound picking and goods issue, similar design options can be utilized to reduce steps and interface accesses [1]. Their application should also be investigated.

8. Conclusion

This article has outlined a customized RF goods receipt solution for SAP Extended Warehouse Management (EWM; SAP Canada Inc., Mississauga, Ontario, Canada) that eliminates Handling Unit (HU) creation and allows purchase order-referenced, multi-delivery inbound receiving on Honeywell Movilizer handheld devices. This solution overcomes two well-documented functional limitations of the SAP EWM standard RF goods receipt solution: mandatory HUs and the single-line-item-at-a-time process used for inbound receiving. These limitations result in concrete throughput losses even in large-volume industrial warehousing environments. In contrast, displaying all open inbound deliveries for the scanned PO, giving the user conditional single-delivery or multi-delivery selection logic, providing full visibility for line items and visual codes for serialized and inspection-flagged materials, and automatically triggering the creation of putaway warehouse tasks once the goods receipt has been posted, we have consolidated what was previously a multi-step, multi-transaction receiving sequence into a single, coherent RF workflow.

Operational metrics we have captured in this paper include direct cost reductions in processing incoming goods per item of 15-30%, measurable throughput increases in goods receipt per hour, reduced operator training costs, faster truck turnaround times at receiving docks, and improved material availability to the maintenance-critical supply chain by aggregating the quality inspection Usage Decision results to the same RF work step, thereby eliminating process fragmentation. These results matter to warehouse management system (WMS) developers, enterprise resource planning (ERP) implementers, and operations technology (OT) leaders involved in the design or improvement of inbound logistics processes in SAP EWM deployments in factories where receiving accuracy and speed are key to plant stability.

Although the examples given here are specific to the SAP EWM implementation, the lessons behind the purchase order-centric receiving, conditional routing logic, embedded quality management, and cloud-hosted mobile application delivery can be applied to all warehouse digitalization projects. For industrial companies looking to invest in digitalization of their supply chain execution functions, solutions that simplify processes and reduce the skills required of their workforce and that fully integrate to enterprise inventory and finance systems offer a route to both short-term operational efficiency benefits and long-term supply chain platform migration readiness.

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Conflict of Interest

The author declares no conflict of interest.

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