



MASTERING ON-HAND CONVERSION: KEY CONSIDERATIONS IN NEW ERP SYSTEM IMPLEMENTATIONS

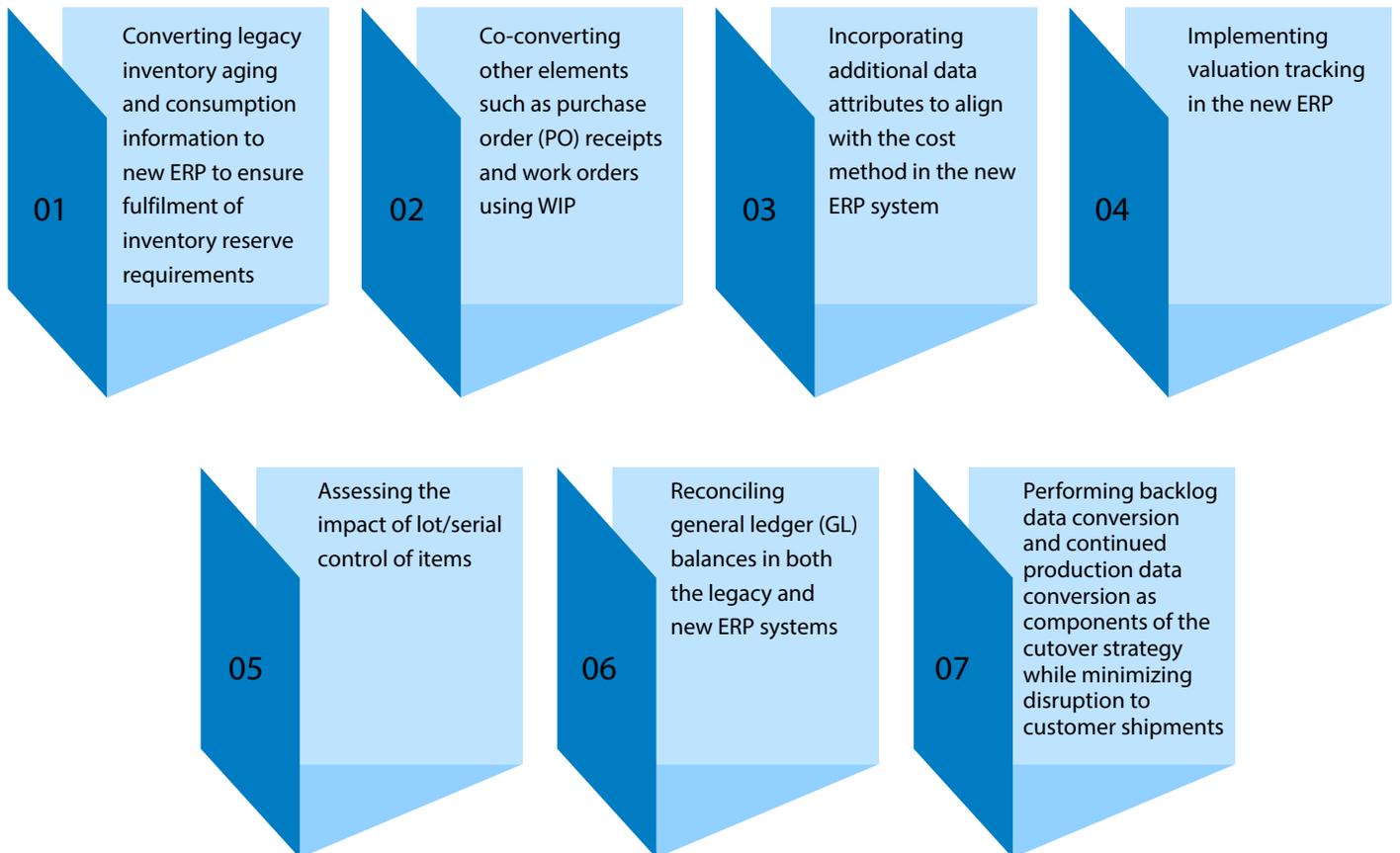
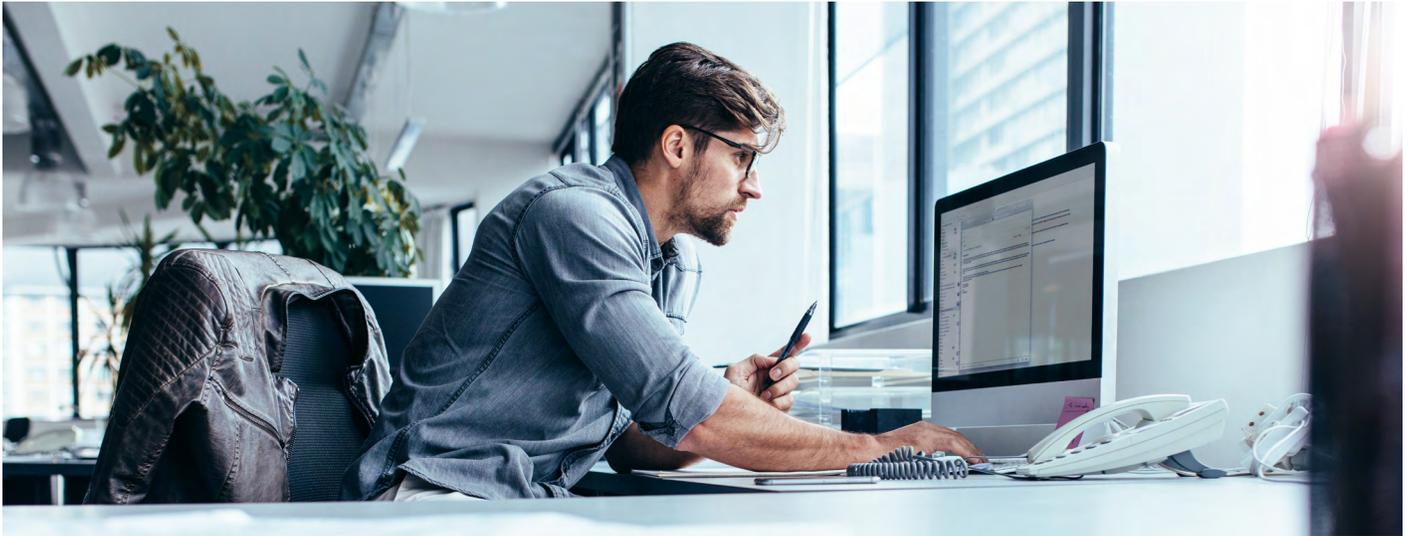
Abstract

In business transformation journeys, data migration is a critical phase. Central to the migration process is on-hand conversion, an important data conversion exercise. It is pivotal to supply chain management (SCM) processes, such as shipping and manufacturing, as well as inventory valuation and financial reporting in enterprise resource planning (ERP) systems. This white paper discusses the various considerations that can help streamline on-hand conversion. From legacy inventory aging and consumption migration to co-conversion practices using work-in-progress (WIP), it discusses the alignment of data attributes with cost methods and the implementation of valuation tracking. While exploring the nuances of on-hand maintenance in existing ERP systems, the paper offers technical insights and practical strategies to help businesses in the overall success of their ERP implementations.

Introduction

Converting the item quantities from the legacy system to the new ERP is the core of the on-hand conversion. Three prevalent concerns in business transformation initiatives include the assurance of accurate on-hand information for dispatch of finished goods to customers within the new ERP system, the guarantee of adequate raw material and semi-finished good quantities in the new ERP system to sustain manufacturing, and the imperative to ensure precise inventory valuation within the new system, along with comprehensive insights into aging and consumption metrics.

Therefore it is critical to consider the following points during on-hand conversion:



This white paper explores each of the considerations in detail.

Figure 1 depicts the considerations and impact areas of on-hand conversion in the legacy system versus the new ERP system implementation.

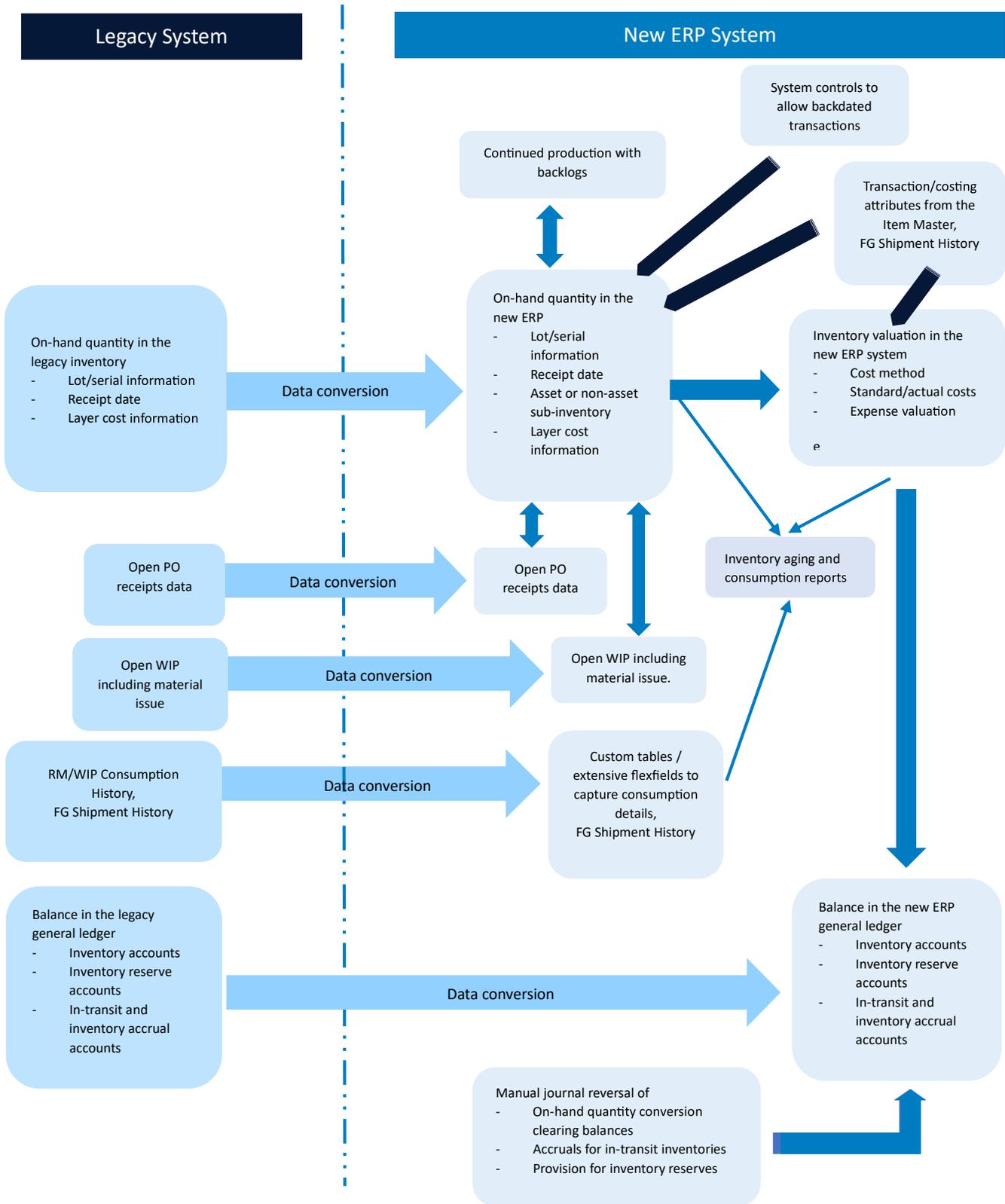


Fig 1. On-hand conversion from the legacy to the new ERP systems – key considerations

To convert the legacy inventory aging and consumption information to new ERP to ensure Inventory reserve requirements are met

When converting on-hand quantities, the standard procedure involves extracting the on-hand quantity from the legacy system and loading it into the new ERP system with the transaction date aligned to the cutover date. This approach generates accurate inventory valuation but overlooks inventory aging. As a result, all inventories will exhibit zero aging when the new ERP system goes live.

Organizations follow corporate inventory reserve policies pivoted on inventory aging and slow (or no) inventory movement, also known as obsolescence. The percentage of reserve applications is subject to change based on item type.

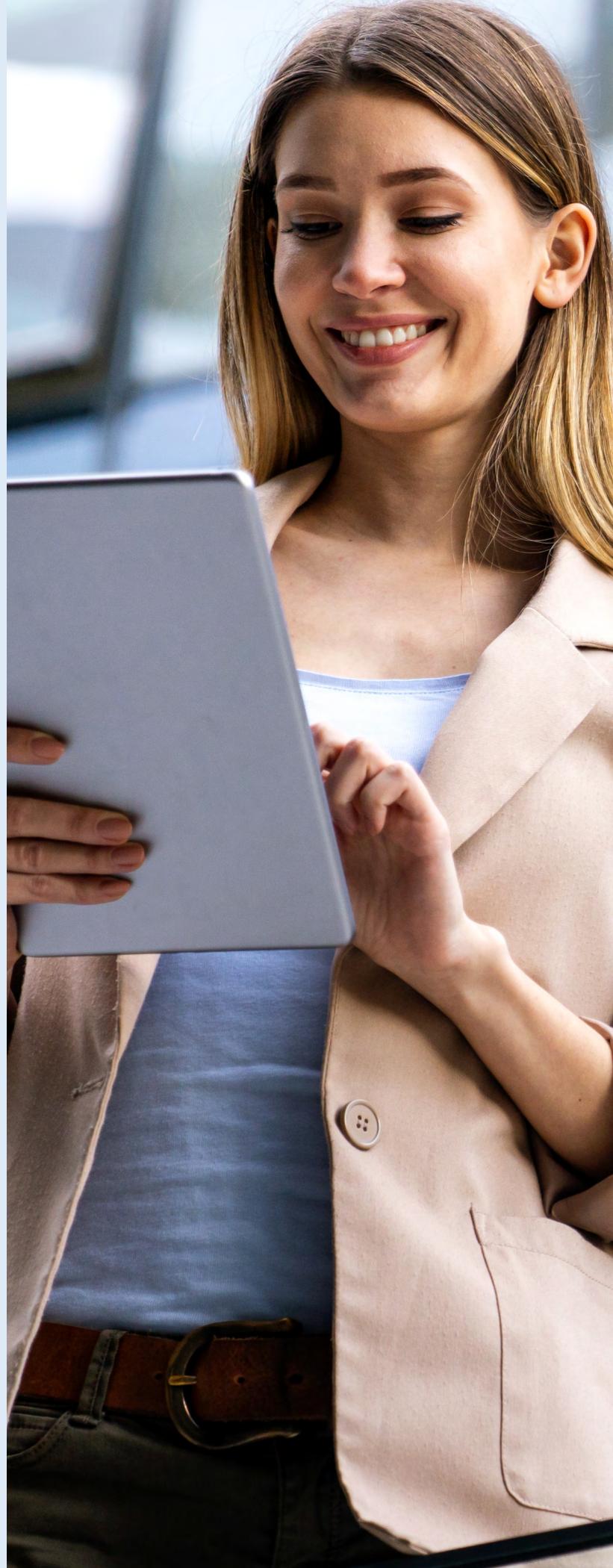
To incorporate aging information into the new ERP system, it is crucial to extract inventory receipt date information from the legacy system and load the on-hand quantities at receipt level with the receipt date information.

Within the ERP system, it is possible to enforce controls that determine whether transactions are permitted with backdated entries or in closed periods. The cutover strategy should consider facilitating appropriate adjustments of the configuration controls with minimal disruption to the existing sites within the new ERP system.

For capturing obsolescence information, it is important to transfer the consumption/sales pattern of items to the new ERP system. This includes migrating historical data on raw material consumption and finished goods sales into their respective time buckets. Importing such information from the legacy system to the new ERP system requires substantial extraction effort. The extraction must consider both receipts and issues over a specified timeframe, adding to the complexity and data-intensive nature of the exercise.

Loading such receipts and issues into the new ERP system in sequence while adhering to the processing date enforcement poses a challenge. This is compounded by the time-sensitive nature of the task, considering the limited cutover window. A viable approach to tackle this is to map the consumption values with designated aging buckets in the extensive flex fields (EFF) at the item level.

This choice must be considered when developing custom inventory consumption reports. These reports must analyze post go-live transactions in the new ERP system to understand consumption details while also considering item-level EFFs for consumption details of before go-live. Organizations must explore the possibility of migrating the sales order/shipment history information into the new ERP, which can serve as inputs to the inventory consumption reports.



Co-conversion of other elements like PO receipts and Work orders (with WIP)

On-hand conversion shares a close association with other conversions such as purchase order (PO) receipt and open work-in-process (WIP) conversion. During cutover, there will be receipts for which accounts payable (AP) invoices have not been recorded in the legacy system.

Matching PO receipts is one of the best practices in organizations where AP invoices are aligned at the receipt level. Despite its complexity, this practice offers several benefits post go-live, particularly in streamlining the finance function with invoice matching and ensuring accurate accrual reporting.

The conversion of open PO receipts, also known as goods receipt not invoiced (GRNI), involves two steps: PO conversion and receipt conversion. Therefore, it is critical to discuss and determine whether on-hand quantities will be loaded exclusive of PO receipt quantities or encompassing them, which will be issued post-conversion. During open WIP conversions, the raw materials charged to the work order during the cutover phase must be converted separately, distinct from open on-hand quantities. To prevent any confusion and ensure clear identification of the on-hand source, it is recommended that distinct conversion clearing accounts be used.

Another key consideration during data conversion is addressing in-transit inventory during the cutover. This category of inventory comprises items dispatched from supplier locations en route to the organization's warehouse. While their on-hand quantity remains unaltered in the legacy system, ownership is transferred to the organization based on incoterms. In such cases, organizations typically record accruals and ledger entries for in-transit inventory within specific accounts. Subsequently, they reverse these entries in the following period, in anticipation of its actual physical receipt.

This can be a routine set of activities that the finance team undertakes as part of their period-end tasks. However, this requires particular attention during the implementation of the new ERP system to ensure seamless migration of the corresponding source documents like POs into the new ERP and prevent issues during the actual physical receipts. Furthermore, the finance team must ensure that the GL balances, including these accruals, are successfully transferred to the new ERP. Accrual journal entries must be reversed during the go-live period, substantiated by comprehensive documentation detailing in-transit inventory particulars.



Additional Data Attributes to Align with the Cost Method

Organizations follow one or more cost methods depending on corporate policies and local regulations. Certain modern ERP systems have the capability to handle the same item or transaction using different cost methods within different cost books or ledgers. Within the same book or ledger, different sets of items can be treated with distinct cost methods. As a result, incorporating the cost method becomes very important during the process of on-hand quantity conversion.

In the case of the standard cost method, the on-hand quantity conversion need not factor in the cost as the standard cost is converted independently.

However, in the case of the other cost methods, such as actual and average costing, the cost must be derived from the transactions. Therefore when considering actual costing or average costing, the costs associated with the receipt layers must be extracted from the legacy system. For actual and average costing, it is imperative to incorporate the transfer of actual and average costs within the on-hand quantity transaction conversion.

For organizations maintaining standard costs at the ledger level and utilizing actual costs exclusively for reporting, the conversion of actual costs can lead to receipt variances. Consequently, it becomes essential to strategically employ conversion clearing accounts within subledger accounting (SLA). These accounts must meticulously gather accounting values from offsets, material overhead absorption, and receipt variances, effectively offsetting the inventory valuation.

Implementing Valuation Tracking in the New ERP

Organizations autonomously establish their criteria for classifying items or transactions to be included within the inventory.

Some organizations allocate a small percentage of their production items for sampling objectives. These items are tracked or monitored in a distinct location or sub-inventory. As these items are not meant to sale and will be disposed of, businesses intentionally exclude them from inventory valuation. In some cases, specific production supplies are expensed out immediately upon purchase.

There might also be situations where certain items, such as spare parts or packaging materials, are defined as inventory items for the purpose of quantity tracking. However, their status as inventory assets may be marked as 'No' to exclude them from inventory valuation.

Therefore, during the on-hand conversion process, the implementation team must carefully consider whether quantities are being loaded under a specific sub-inventory or if the items being loaded are marked with an inventory asset value of 'No.' Taking this into consideration, they must provision for the expense valuation accounting.



Assessing the Impact of Lot/Serial Control of Items

Most modern ERP systems include a lot or serial control functionality. Organizations have the option to either enable this feature when transitioning from a legacy system to the new ERP or re-implement their inventory module by activating the lot control. This introduces the challenge of maintaining the lot or serial control attribute at the item level.

However, during on-hand quantity conversion, either lot-controlled items are not provided with lots or non-lot controlled items are provided with lots. This could lead to unwarranted corrections in the item master data or on-hand quantity source data within a narrow cutover timeframe. Additionally, within the physical warehouse, inventories must be accurately tagged with new lot or serial information. This ensures that inventory picking occurs from the correct locations after go-live. Therefore, this data conversion process involving lot or serial control, along with the correct lot/serial assignment, is practiced and rigorously tested in lower (testing) instances before migrating to the live production environment.

In some industries, including precious metals, ornaments, and high-value chemicals, the cost or the inventory valuation is tracked at the lot or serial level. Therefore, ensuring the migration of the inventory valuation to the lot/serial level becomes critical.

Reconciling GL Balances in Legacy and New ERP Systems

An essential requirement for transitioning to the new ERP system involves securing the finance team's sign-off on inventory valuation. A fundamental aspect of this process is obtaining accurate values at the subledger level. Another crucial consideration entails matching subledger balances with those of the GL and reconciling them for any differences.

In cases where businesses are migrating from completely disparate systems, such as using different charts of accounts or moving to different costing systems, aligning and reconciling converted subledger balances with converted GL balances can prove challenging.

When transitioning to a different GL system, it is imperative to ensure accurate mapping of legacy inventory accounts to the new ERP. Businesses must give due weightage to the conversion of inventory reserves and in-transit account balances. The implementing team must encourage businesses to address legacy reconciliation issues before the go-live of the new system.

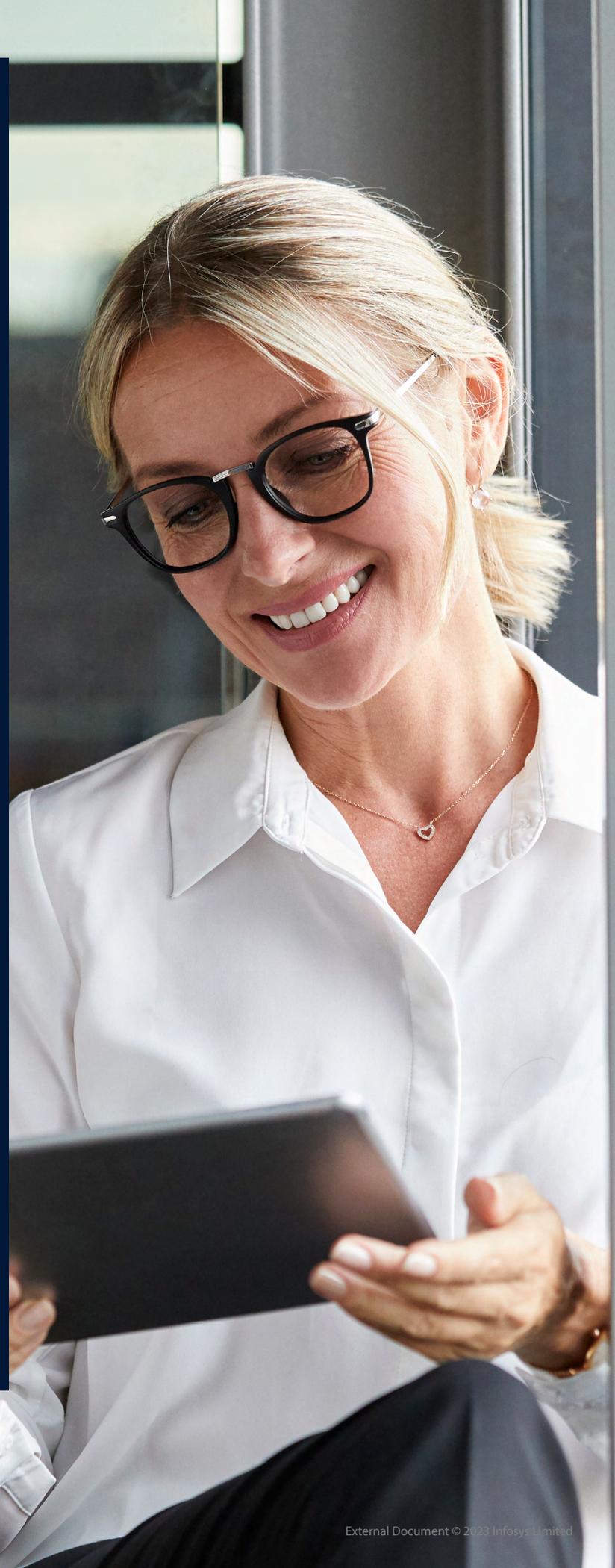
Manufacturing companies typically grapple with inevitable variances between the new ERP's rolled-up costs and legacy costs. This prompts the key decision of whether inventory valuation for business sign-off should be based on the legacy costs or the rolled-up costs of the new ERP system.

If the business decides to sign off based on legacy costs, then the conversion of legacy costs must be prioritized. Post sign-off, but before system go-live, manufacturing costs must be aggregated, with the impact on inventory value incorporated into standard cost adjustments.

If the business opts for sign-off based on ERP manufacturing costs, it could introduce discrepancies between the subledger and GL balances. In such instances, the finance team must rectify the discrepancies using manual journal entries (JE).

Performing Backlog and Continued Production Data Conversions

In certain implementations where halting production on the shopfloor during the cutover is not feasible, the business team accumulates backlogs of production orders. These backlogs are subsequently loaded into the new ERP after a few days. However, concurrent shipments from the new ERP require the availability of on-hand quantities in addition to the converted on-hand figures. In such a scenario, it is essential to monitor and track the extra on-hand quantity conversion and its subsequent reduction offline, following the completion of the backlog production work order upload.



Conclusion

Successful on-hand conversion when transitioning to a new ERP system calls for a systematic approach. It involves various aspects, including cost methods, lot/serial control, and reconciliation between subledger and GL balances. In this paper, we have also explored the essential considerations of legacy inventory aging and consumption migration, co-conversion of different elements using WIP, and implementing valuation tracking. Together, these hold the key to effective on-hand conversion that can ensure efficient functioning of the new ERP.

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With over 12 years of experience in finance and supply chain transformation programs, Sandeep has been instrumental in driving conversion and cutover strategies as well as leading transformation in costing and inventory management for global manufacturers. Sandeep is an Oracle-certified expert in the Oracle Finance and Costing modules.

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