SAP Challenges and Solutions: *Three Real World Scenarios*

IT teams are responsible for day-to-day operations and maintaining a reliable SAP environment, but are often faced with a variety of challenges. Explore three common scenarios and the efficient solutions we provided for one company.

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Introduction

Today IT departments face a variety of challenges when it comes to maintaining a reliable SAP environment. At the same time, they also need to manage other projects and bigger issues, including efforts to meet new requirements, or mission-critical initiatives that can help grow the business. Unfortunately, most IT teams are too swamped and understaffed to meet many of these challenges, let along address bigger issues that may impact the business.

This white paper provides an overview, or snapshot, of several scenarios, as well as the competent solutions and benefits provided by Quinnox. All these scenarios grew out of several challenges faced by a soft drink bottling company, with equipment and machinery being their main physical assets. The solutions we implemented streamlined their asset management processes and reduced overhead, such as inventory of spare parts. Other major improvements and cost reductions came from much greater efficiency in procuring parts and performing maintenance.

Scenario #1: Management of faulty spare parts

Problem:

In this scenario, no proper tracking was available for the refurbishment of defective spare parts, which are generally of high value. They tend to have great economic importance, and are often part of a core process within a maintenance department. The client had no tracking system available for damaged high value spare parts sent to an external vendor for repairs..

In standard SAP, we need to activate the following business function for

▸ Refurbishment and Subcontracting (LOG_EAM_ROTSUB)

▸ Refurbishment and Subcontracting 2 (LOG_EAM_ROTSUB_2)

▸ (LOG_MM_SERNO) for external refurbishment process

This provides an SAP solution to the above problem. But, in this client scenario, it was not advisable to activate this business function, since there was a risk of having no impact on other functions and processes in the existing IM module of the business.

Solution:

The Quinnox solution was designed so that business requirements were mapped in standard SAP without activating business functions. The solution was a combination of internal refurbishment and subcontracting for external refurbishment.

1) First, we created an internal refurbishment order for damaged or defective parts.

2) Next, we created a subcontracting PO for the damaged items.

3) The damage or defective parts were sent to the vendor after releasing the subcontracting PO.

4) If the items were repaired, then material received (MIGO) from the vendor was designated as a new valuation type against the subcontracting PO, followed by the internal goods process of refurbishment orders.

The following graphic provides an overview of the process flow for refurbishing repairable spare parts...
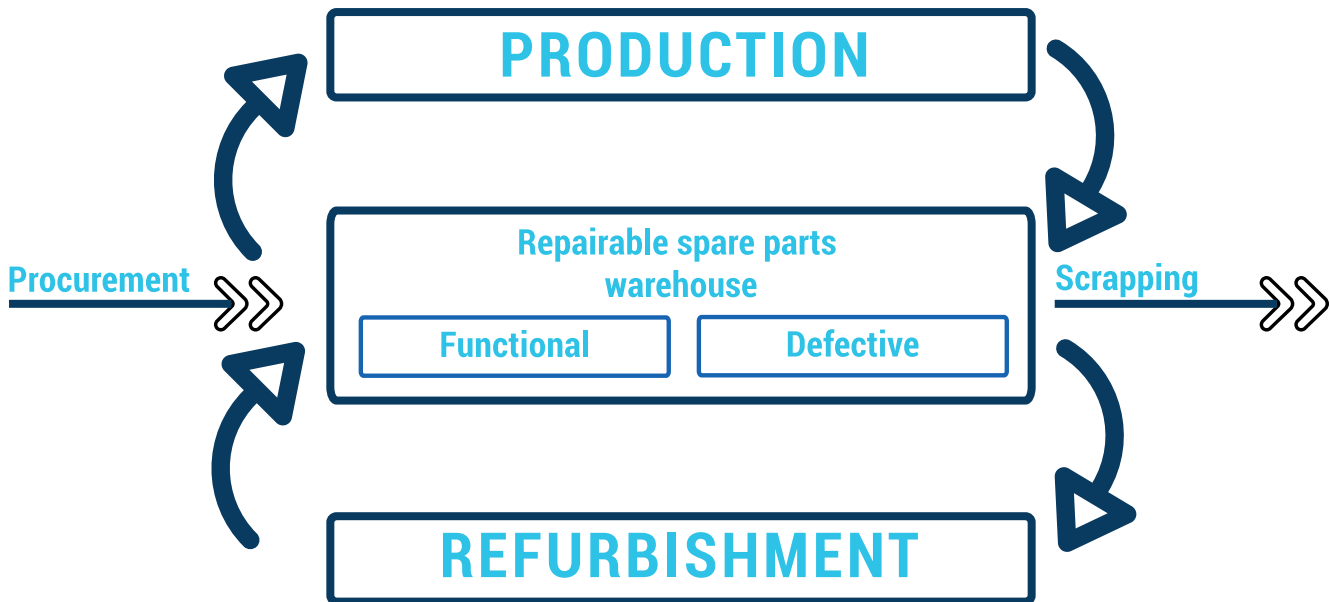
After refurbishment, both the stock value of the repairable spare items in the warehouse and the charges to the cost center change. In inventory management, the stock assets will have increased in value after the refurbishment.

By withdrawing the defective material, a material debit is created. And, by returning the refurbished material, a credit memo is applied to the order. The account assignment object (for example, the warehouse as the receiving cost center) receives a credit memo in the amount of the difference, minus the resources required (internal service, other spare parts, external services, etc).

Benefits of this solution:

▶ No need to activate business functions

▶ Tracking of defective spare parts is sent to the vendor

▶ Creation of a customized refurbishment cost analysis report

▶ Refurbishment of repair parts can be done internally in a shop, or externally at a vendor

▶ Damaged or defective parts brought into inventory at zero value

▶ Expense refurbishment settles to cost center

Conclusion

This Quinnox solution is best suited for businesses that have implemented only an inventory management module (not a WM module).These companies are likely to experience a drastic reduction in manpower required for counting, and increased ease in traceability of spares in the storeroom.

Scenario #2: Inventory optimization
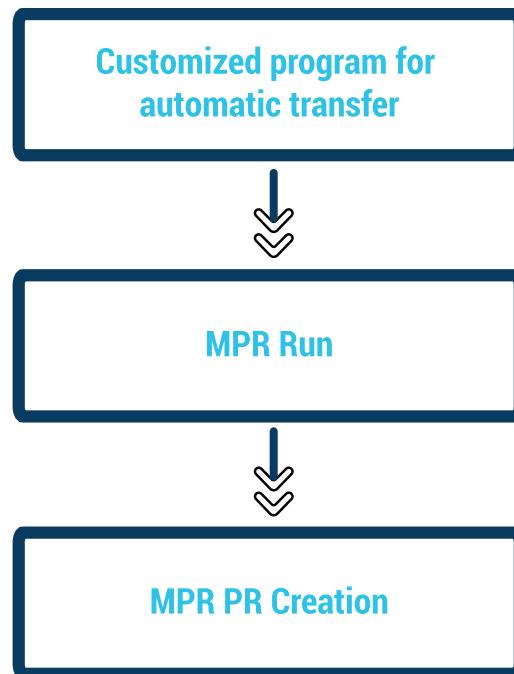
Problem:

In this SAP scenario, the client had no proper system available for spare parts planning. There was more than one store location. Availability of spare parts at the time of a crisis was not up to minimum standards. Lot of spare parts were procured for planned maintenance, but when unused, there was no accountability. For breakdown, the inventory was managed based on the safety stock and reorder point. This resulted in a lot of unused inventory dormant in the stores. And all of these factors led to high inventory costs too. In standard SAP, we need to activate the following business function for

Solution:

The MRP area concept of SAP was used to differentiate the two different storerooms. The MRP strategy for both storerooms was maintained separately based on the requirement. For planned storage locations, the spare parts requirement planning was based on the maintenance order needs. For the breakdown storage location, the spare parts requirement planning was based on the reorder point.

Provisions were made to transfer excess spare parts from breakdown stores to planned stores based on different business scenarios. Also, the open purchase requisitions and open POs in the breakdown stores to be considered before transfer were taken into consideration.

In the entire solution, the automatic sloc-to-sloc transfer played a major role. This customized program is made to run before the MRP run. Customization was also done to default the storage location at the maintenance order type level. This was done to avoid the manual intervention of selecting the storage location, while creating the maintenance order.

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┌─────────────────────────────────┐
│   Customized program for        │
│      automatic transfer         │
└─────────────────────────────────┘
              ⌄⌄
┌─────────────────────────────────┐
│           MPR Run               │
└─────────────────────────────────┘
              ⌄⌄
┌─────────────────────────────────┐
│        MPR PR Creation          │
└─────────────────────────────────┘
```

The Quinnox solution also provided a customized report, including details of spare parts that were transferred from one storage location to the other via the automatic transfer program. This included the bin number details. This helped the store keeper to physically identify the spare parts and transfer them. This was an efficient and elegant solution for the client, resulting in high user satisfaction.

Benefits of this solution:

▶ Reduction in inventory cost by **$2 million per year**

▶ Time and effort savings

▶ Comprehensive reporting that covers a wide range of options to trace the transferred spare parts, bin numbers and respective work order numbers

▶ All standard SAP reports available for further analysis and inventory optimization

▶ Optimization of material available for planned work orders

▶ Real time visibility of the inventory—quantity and values

▶ Global visibility of stock

Conclusion

The Quinnox SAP solution provides an efficient way to manage different storerooms with different strategies for spare parts planning, leading to inventory reduction

Scenario #3: Warehouse management (WM) and inventory management

Problem:

Every organization that maintains inventory has to perform the physical counting of its inventory as an audit trail. This is done to check the consistency and accuracy between the system quantity and physical quantity. This exercise is usually done once, or as often as three times per year, depending on the organization and business.

All the reports in SAP related to spare parts do not provide the information regarding the bin location of these items if warehouse management (WM) is not implemented.

Solution:

This solution addressed the entire end-to-end process followed for a physical inventory count. It encompassed the creation of a physical inventory document that was generated in such a way that it pulled the information of the bin location of each spare part in a user-specific format. Provisions were made for filtering the spare parts based on bin location.

Additionally, performing the inventory count based on the threshold value of the spare parts was also made available. By threshold, this means the moving average price (MAP) or the total stock value of a particular spare part. Selection of spare parts for physical count based on a user-specific range of MAP or the total stock value was possible.

For the recount inventory document, similar provisions were made for the bin location. Also, based on the difference in the SAP quantity and physical count of a spare part, the recount document was created automatically. Provisions were made for bin location in reports so that spare parts could be located and accessed easily and faster, wherever needed.

Benefits of this solution:

- ▶ The entire process of physical inventory was done online
- ▶ Manual Intervention was reduced drastically
- ▶ Reduced manpower required for physical count process
- ▶ Enhanced user satisfaction
- ▶ Availability of standard SAP reports for further analysis of physical inventory
- ▶ Real time visibility of the inventory in term of quantity and values
- ▶ Increased accuracy of inventory
- ▶ A true reflection of financial position—gain or loss from physical inventory count immediately passed on to the right cost center or department
- ▶ An integrated system for the entire cycle

Conclusion

This Quinnox solution is best suited for businesses that have implemented only an inventory management module (not a WM module).These companies are likely to experience a drastic reduction in manpower required for counting, and increased ease in traceability of spares in the storeroom.

Summary

This wide variety of SAP scenarios described here and experienced by one company illustrate the many challenges IT personnel face today with a number of common issues. Unfortunately, most IT teams are too swamped and understaffed to easily or readily solve these issues.

Quinnox can help with SAP solutions and services that can help your organization:

- ▶ Maximize ROI and get the most from your SAP technology
- ▶ Mitigate risk with expert consultation on compliance, technology change, environmental issues, business systems and stakeholder needs
- ▶ Boost your operational and competitive advantage with streamlined processes
- ▶ Accelerate business growth with SAP CRM and other bottom-line-boosting technologies