# Unlocking Efficiency And Precision With Purchase Order Confirmation

## Efficiency Unleashed: Mastering PO Confirmation

[1]Ravi Dave, [2]Gaurav Singh
[1]Application Manager, [2]SAP Manager

*Abstract:* Purchase Order Confirmation is an innovative solution that empowers buyers with a seamless and efficient process for confirming purchase orders based on critical factors like quantity, value, and delivery date. In today's fast-paced business environment, accurate and timely order confirmations are pivotal in ensuring smooth supply chain operations and fostering strong vendor relationships. This article explores the SAP Purchase Order Confirmation design, implementation, and functionality, highlighting its key features and advantages. With its user-friendly interface and robust backend algorithms, the application facilitates effortless review and validation of purchase orders against predefined criteria, streamlining the confirmation process and significantly reducing the risk of errors and discrepancies.

*Index Terms* - SAP Procurement, Purchase Order Confirmation, Efficiency, Productivity.

## I. INTRODUCTION

The capacity to validate purchase orders accurately and effectively is crucial for firms in the modern business environment. However, traditional SAP solutions frequently need to include manual single purchase order line-by-line confirmation. The SAP Purchase Order Confirmation was created as a novel solution to this constraint. With this application, buyers may validate purchase orders based on important factors, including PO quantity, value, and delivery date.

The paper explores the SAP Purchase Order Confirmation functionality [1-2], design, and implementation, emphasizing its important features and advantages. The solution streamlines the confirmation process and lowers the possibility of errors and discrepancies by providing buyers with an easy-to-use interface and reliable backend algorithms that enable purchasers to evaluate and validate purchase orders against established criteria quickly.

One of its most notable benefits is the capacity to provide exceptional transparency in procurement operations. By incorporating this service into their procedures, businesses may track order confirmations in real-time, shortening the procurement period. The adjustable parameters increase its effectiveness and accuracy and let users customize the confirmation process to meet their business needs.

The SAP Purchase Order Confirmation application significantly improves collaboration between buyers and providers in the procurement environment. Automated alerts and rapid feedback systems swiftly address errors or delays, encouraging a smooth flow of goods and services.

As a result, the SAP Purchase Order Confirmation application is a ground-breaking product that enables buyers to make knowledgeable choices, enhancing supply chain management and fostering vendor relationships. As businesses adopt digital transformation in their procurement processes, this technology becomes increasingly important for navigating the complexity of the contemporary business environment, reinventing the process of confirming purchase orders and fostering operational excellence.

## II. PROCUREMENT PROCESS FLOW FOR CONFIRMATION
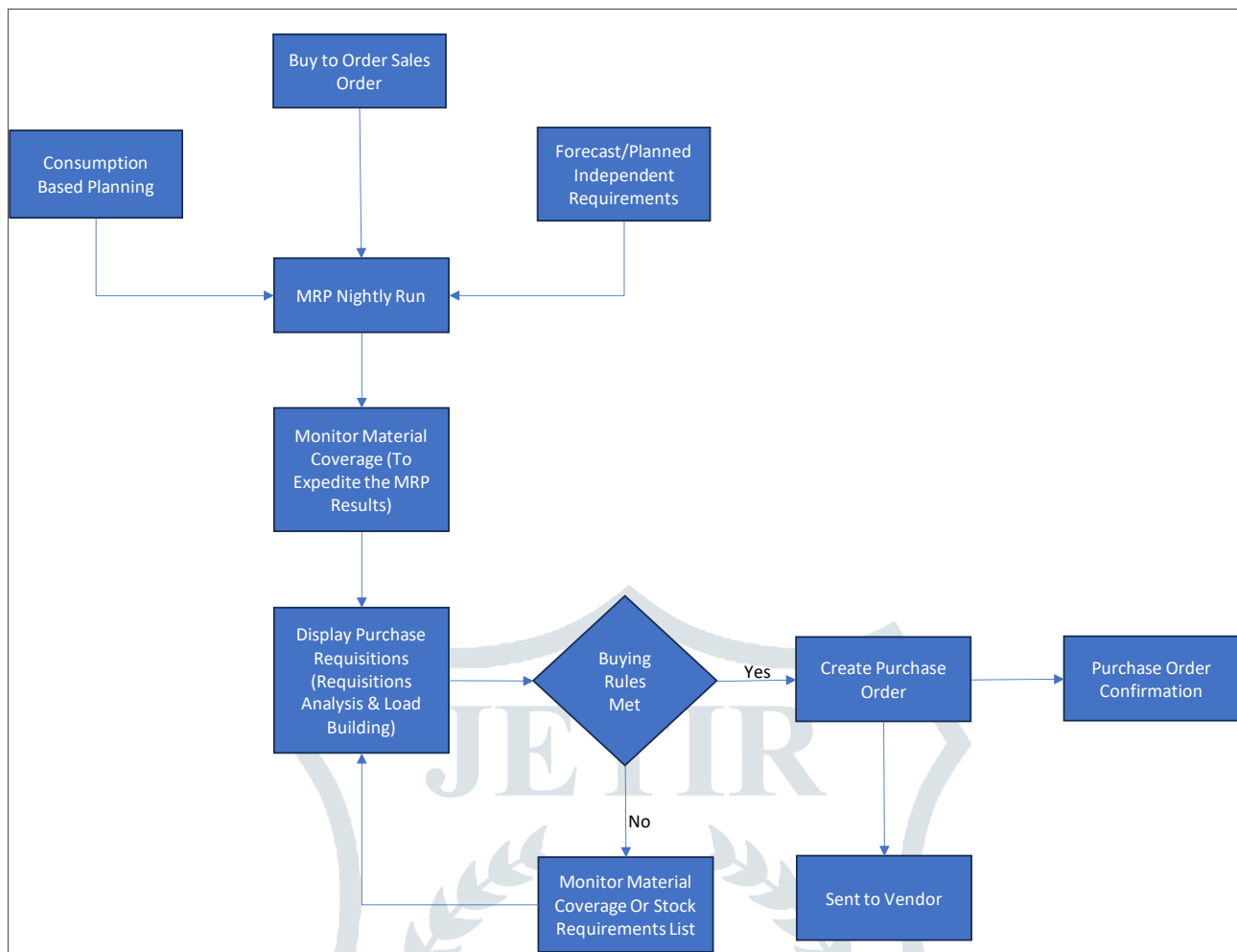
Below is the procurement process flow:

*Figure 1: Procurement Process Flow*

- Purchase Requisition to Purchase Order Conversion: A purchase requisition is a formal request from a department within a company to the procurement department to purchase goods or services. Once the procurement department approves the requisition, it is converted into a purchase order (PO) [3]. The PO contains specific details such as the items to be purchased, quantities, agreed-upon prices, delivery dates, and other relevant terms and conditions.
- Sending the Purchase Order to the Vendor: Once the purchase order is generated, it must be communicated to the vendor [4] from whom the goods or services are procured. The method of communication can vary depending on the vendor's preferences and capabilities. Commonly, purchase orders are sent out to vendors via email, where the PO document is attached as a PDF or in the body of the email. Alternatively, Electronic Data Interchange (EDI) can electronically transmit the purchase order to the vendor's system.
- Vendor Confirmation of Purchase Order [5-6]: Upon receipt of the purchase order, the vendor reviews the details and confirms the purchase delivery date, quantities, and values per their ability to fulfill the order. The confirmation process ensures that both parties are on the same page regarding the agreed-upon terms.
- Confirmation using Custom Fiori Application: The buyer (the company placing the order) uses a custom Fiori application to confirm. Fiori is a design system by SAP that provides a collection of apps with a modern, user-friendly interface. The custom Fiori application specifically designed for purchase order confirmation helps streamline the process and makes it more efficient. The custom Fiori application presents the relevant details of each purchase order to the buyer, including the delivery date, quantity, and values. The buyer then reviews these details and cross-checks them with the original purchase order and the company's requirements.
- Setting the Confirmation Control Key [7-8]: Once the buyer confirms that the delivery date, quantity, and values in the purchase order are accurate and acceptable, the confirmation control key is set. This action marks the purchase order line item as "confirmed" within the system. The confirmation control key is a status indicator used to track the confirmation status of purchase orders. After confirmation, the line items of the purchase order that have been verified and marked with the confirmation control key are confirmed and proceed to the next stages of the procurement process, such as inbound delivery, goods receipt, and payment processing.

This process ensures that the vendor and the buyer agree to the purchase order terms, minimizing potential discrepancies and ensuring a smooth procurement process [9]. A custom Fiori application enhances the user experience and facilitates effective communication and collaboration between parties.

### III. SOLUTION STRATEGY

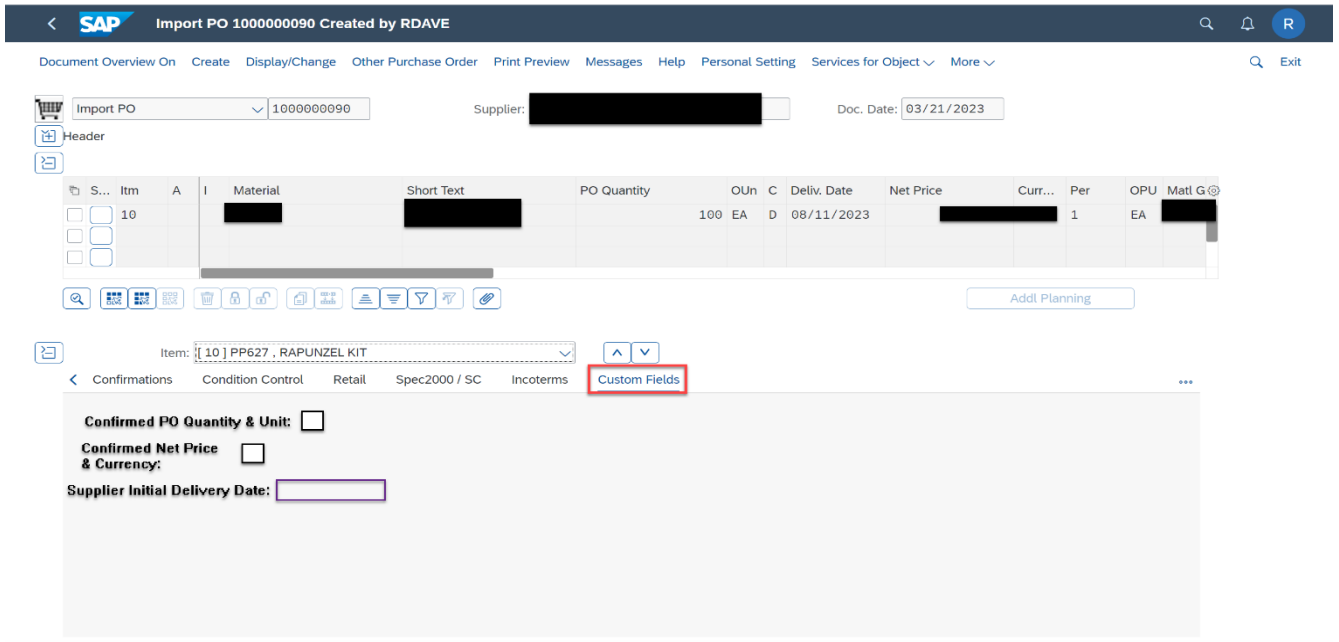● Perform Purchase Order Item screen User Exit enhancement to add a custom tab and include the below fields:



*Figure 2: Purchase Order Item Custom Fields*

| Fields | Logic |
|---|---|
| Confirmed PO Quantity & Unit | Checkbox: Can be turned on or off. It should capture the change log. |
| Confirmed Net Price & Currency | Checkbox: Can be turned on or off. It should capture the change log. |
| Supplier Initial Ship Date | Dropdown value as a calendar. Buyers/Planner enters it. Once it's entered, it needs to be greyed out. Once it's entered, it should update the PO delivery date. Here is the logic.<br><br>1st, get the transit time in days, which is = Lead time (EKPO-PLIFZ) - Production Lead Time (Z field from material master)<br><br>Delivery Date = Supplier Initial Ship Date + Transit Time<br><br>Note: Please ensure that the delivery date is a validated calendar date in the system. |

● Create a Fiori Tile "Purchase Order Confirmation."
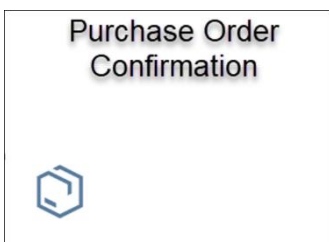


● Upon the execution of the Fiori tile, Only open PO line(s) with sent status must bring in output. Here is the logic: Note: If any additional filter is applied on the screen, then filter those records: Sent status and Delivery completed flag items shouldn't be coming in the output.

    a.    To Fetch all the open PO line item(s) where EKPO-ELIKZ is initial (or blank)

    b.    To validate if those open PO line item(s) have been sent, Pass open line items to the table NAST and see NAST-VSTAT = 1. Only Bring those PO line items in the report.

- Fiori should bring the below fields and layout.



- Logic for the fields

| Field(s) | Logic | Default | Editable on Fiori Tile |
|---|---|---|---|
| Purchase Order | From EKPO-EBELN | X | |
| Document Type | From EKKO-BSART | | |
| Vendor | From EKKO-LIFNR | X | |
| Vendor Name | Pass Vendor from EKKO to LFA1 and get LFA1-NAME1 | X | |
| Purchasing Group | From EKKO-EKGRP | | |
| Purchasing Group Name | Pass the purchasing group code to T024 and get T024 – EKNAM. | | |
| Item No | EKPO-EBELP | X | |
| Item Category | EKPO-PSTYP | | |
| Material | EKPO-MATNR | X | |
| Material Description | EKPO-TXZ01 | X | |
| Plant | EKPO-WERKS | X | |
| PO Ordering Quantity | EKET-MENGE | X | |
| Ordering Unit | EKPO-MEINS | X | |
| Confirmed PO Quantity & Unit | EKPO- ZPOQ | X | Yes |
| PO Quantity (in Base Unit) | Pass the PO, and for each item, get the EKPO- MENGE * (EKPO- UMREZ / EKPO- UMREN) | X | |
| PO-line UOM (Base Unit) | For each PO line item, get the EKPO- LMEIN | X | |
| PO Item Delivery Date | Pass the PO and item number to EKET and get EKET-EINDT | X | |
| PO Net Price/Currency | EKPO-NETPR/EKKO-WAERS (for example $2800/USD) | X | |
| Confirmed Net Price & Currency | EKPO-ZNPR | X | Yes |
| PO Price Unit/Ordering Price Unit | EKPO-PEINH/EKPO-BPRME (for example, 100/EA) | X | |
| Conf. Control | EKPO-BSTAE | X | |

| Supplier Initial Ship Date | EKPO- ZDATE | X | Yes (If initial only) |
|---|---|---|---|
| Material Group | EKPO-MATKL | | |
| Material Group Description | Pass material group to T023 and get T023- WGBEZ | | |
| PO Creation Date | EKKO-AEDAT | | |
| Inbound Delivery | Pass PO number item number, Confirm. Cat.: LA to EKES and get the inbound delivery number (VBELN). If multiple deliveries are found, then show them as all and separate them by, for example, 180000322, 180000323, <br><br> Note: SAP doesn't link inbound delivery with schedule lines, so this is the logic I can think of. | | |
| Reference Document Number | For the above inbound delivery, get the EKES-XBLNR (This is the container Number) | | |
| Goods Receipt Quantity | Pass the PO and line item to EKBE. (Do the sum of S - Debit) - (Do the sum of H - Credit) | | |

- Below, fields can be editable from the Fiori screen.

    a. Confirmed PO Quantity & Unit
    b. Confirmed Net Price & Currency
    c. Supplier Initial Ship Date --> Only editable if it's initial. Once it's entered, it needs to be greyed out.

- From the Fiori tile, a user enters the above field and clicks on save. It should save the changes to the PO/line item.

- There is a select multiple-line option also available. That option allows users to mass-confirm PO line item(s). If a user selects multiple lines, then the program should do this:

    o Show a Warning message: "You have only selected XXXX out of a total of XXXX rows. Please either scroll down to select additional rows or set filters to reduce the number of rows displayed". This is only when the number of records exceeds what you see on screen.
    o Once the user selects save, the program should do the following:

        ▪ It should only turn on the "Confirmed PO Quantity & Unit" flag and "Confirmed Net Price & Currency" for the selected records if the entry is initial/blank. Don't overwrite the checkbox if it's already turned on.
        ▪ Supplier Initial Ship Date should be the same as PO Requested Ship Date if the Supplier Initial Ship Date is blank. If it's not blank, then don't overwrite it.

- The PO number should be hyperlinked. The user should be able to navigate the "Display Purchase Order" (i.e., Me23n) Fiori tile. Expeditor will use this functionality to update the header or line-item comments.

- Fiori tile should have sort, filter, download, and variant functionality.

- The Security of Fiori Tile (Catalog/Group) is also a key solution piece.

    a. The Complete Business Role would have two single roles at minimum.
    b. Tile access would be provided via a Single role in the Fiori system, with access to the relevant Fiori tile catalog and Group.
    c. The Single role in the backend S4 system would have the necessary Odata Services (S_SERVICE Auth Object) and code "Display Purchase Order (i.e., ME23N) for purchase order and other related authorization objects needed for purchase order code needed for Tile to display required data.
    d. Both single roles (One from Fiori and One from S4) would be added in Job Role, which would be assigned to end users, providing access for Fiori Tile to work.
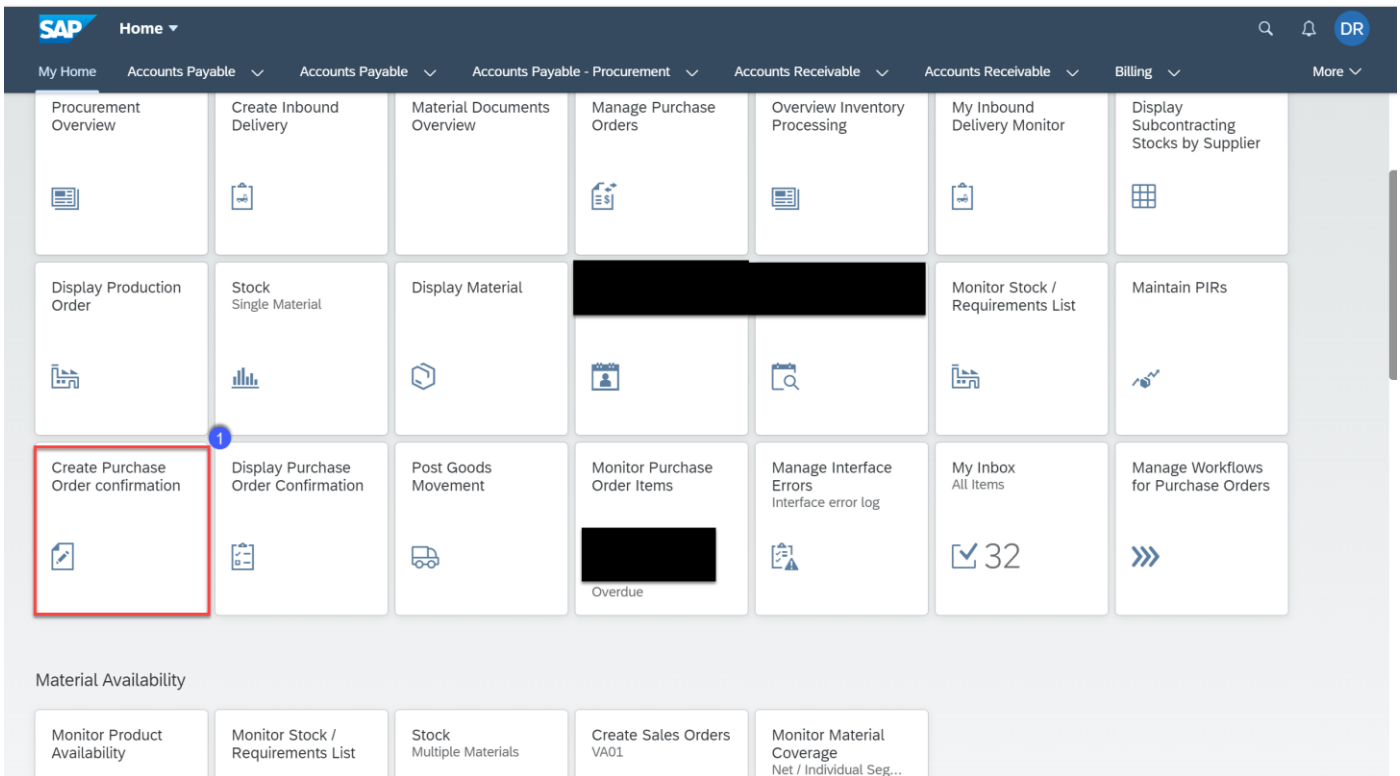
**IV. SOLUTION EVALUATION AND CONFIRMATION**



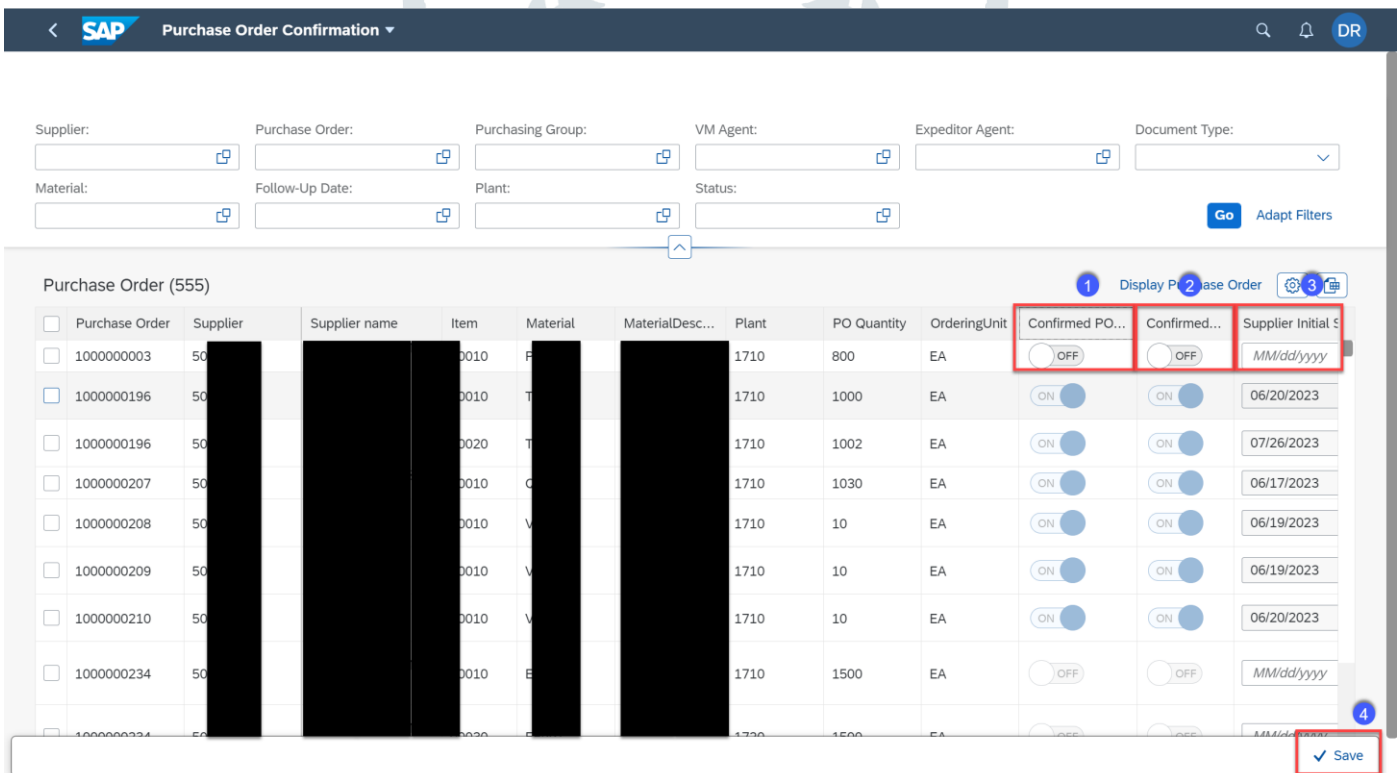*Figure 3: Create Purchase Order Confirmation*



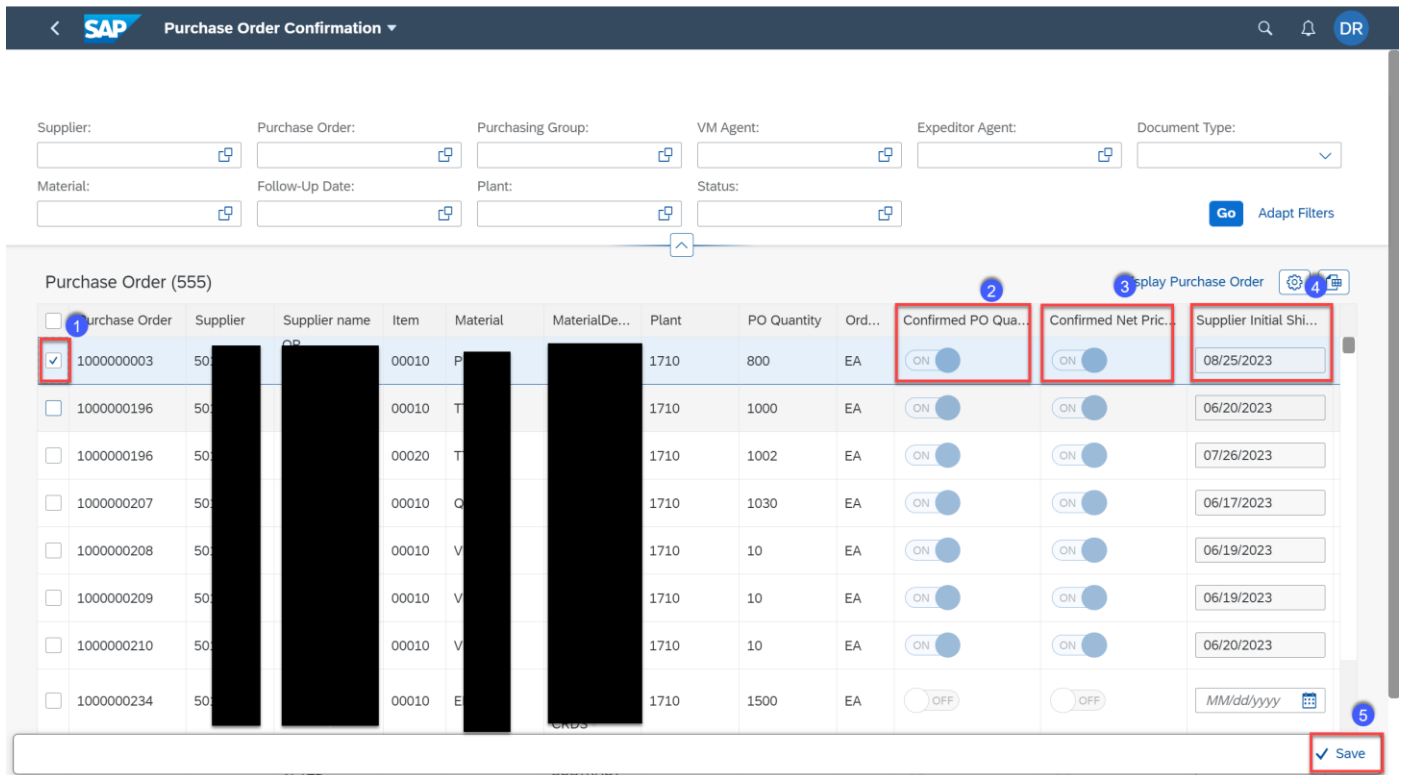*Figure 4: Create Purchase Order Confirmation*

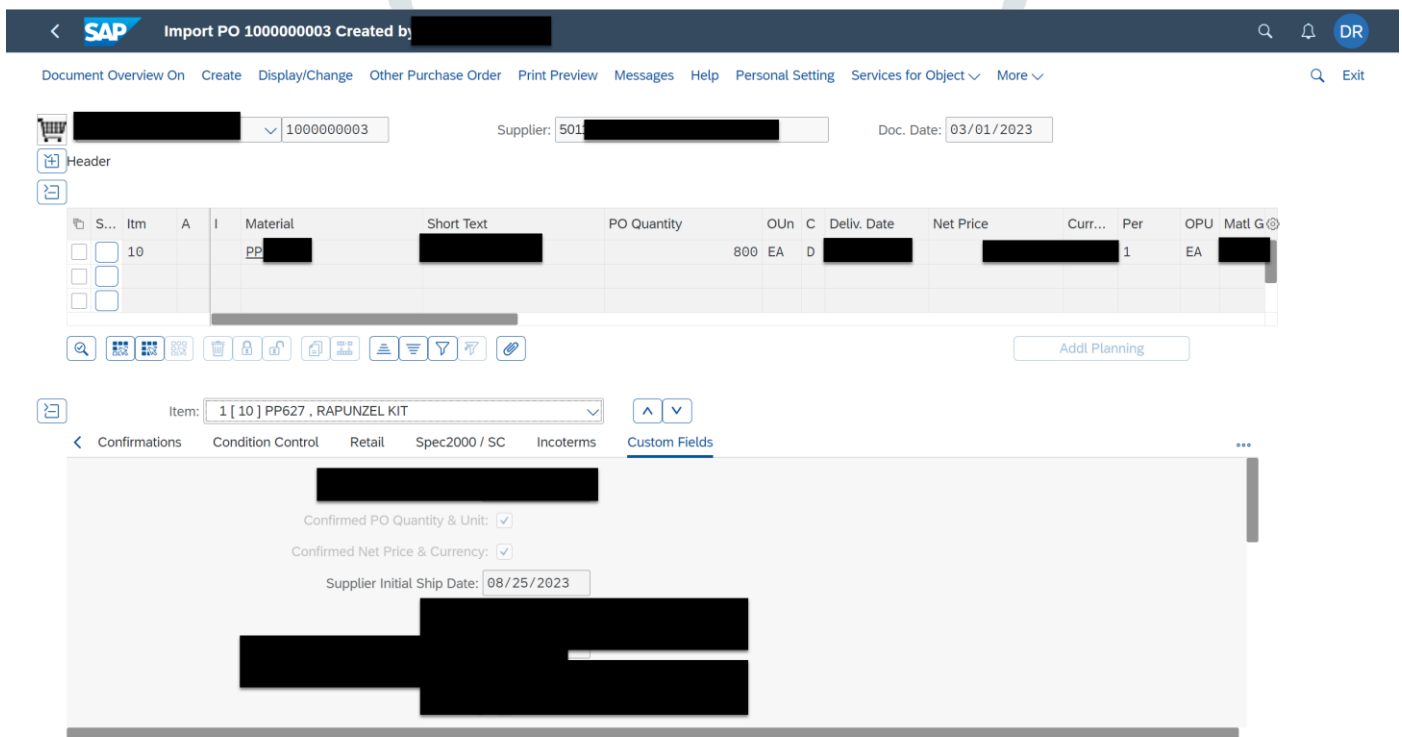*Figure 5: Create Purchase Order Confirmation*



*Figure 6: Create Purchase Order Confirmation*

**V. RESULTS AND DISCUSSION**

Key Benefits of SAP Purchase Order Confirmation:

- Time Savings: Manual processing of many purchase orders can be resource-intensive and time-consuming. The purchase order confirmation automates this process, reducing the time required to handle purchase order confirmation and enabling procurement teams to focus on strategic tasks.

| Company's Revenue | Time saved per Purchase Order (In Minutes) | Total Purchase Order(s) processed annually | Total Minutes Saved | Total Hours Saved | Hourly Salary | Total Saving Per Year |
|---|---|---|---|---|---|---|
| $800M - $1B | 10 | 50,000 | 500,000 | 8,333 | $36.06 | $300,500 |
| $1B - $1.5B | 15 | 65,000 | 975,000 | 16,250 | $36.06 | $585,975 |
| $1.5B - $2B | 20 | 100,000 | 2,000,000 | 33,333 | $36.06 | $1,202,000 |

- o Per the study, we found that an average of 10 minutes is saved per purchase order confirmation. Organizations with revenue of $800M to $1B having 50,000 purchase orders annually turn to a total of $500,000 (10*50,000) minutes annually.
- o 500,000 minutes means 8,333 hours, and if buyers have an average hourly salary of $36.06, a total saving of $300,500 annually.

- It ensures order accuracy, communicating between buyers and suppliers, clarifying expectations, and fostering commitment to delivery timelines. Formalizing agreements helps prevent disputes, enhances compliance, and aids in cost control through price adherence. Efficient confirmation processes also improve inventory management, evaluate supplier performance, and optimize workflow. This practice establishes an essential audit trail, aids in forecasting and planning, and supports accurate payment processing. Furthermore, it strengthens supplier relationships, encourages data analytics for process enhancement, and ultimately streamlines the procurement process while mitigating risks.

## VI. CONCLUSION

In conclusion, the SAP Purchase Order Confirmation Fiori tile is a potent tool that improves and streamlines the procurement process within enterprises. Both procurement teams and vendors may gain a lot from this user-friendly interface, improving the workflow's efficiency, accuracy, and transparency.

Thanks to its user-friendly design and real-time information updates, the Fiori tile allows customers to monitor, track, and finalize purchase orders from anywhere. This lowers the possibility of mistakes and delays and gives vendors and procurement specialists a smooth experience.

Additionally, the connection of the Fiori tile with the powerful ERP system from SAP assures data integrity and compliance, improving supply chain management in general. It encourages stakeholder cooperation and supports well-informed decision-making essential for effective procurement processes.

The SAP Purchase Order Confirmation Fiori tile is a great tool for streamlining procurement procedures as businesses prioritize efficiency and agility and embrace digital transformation. Its user-friendly design and integration capabilities make it a crucial tool for companies trying to maintain their competitive edge and adjust to the constantly changing requirements of modern procurement.

The SAP Purchase Order Confirmation Fiori tile, which offers a simple and effective approach to handling purchase orders, improving vendor relationships, and fostering overall operational excellence in the procurement department, represents a significant advancement in procurement technology.

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