

## **Chapter 4**

# **CUSTOMER RELATIONSHIP MANAGEMENT IN SAP SD AND SAP FIORI: PROCESSES FROM INQUIRY TO PAYMENT**

**Sümeyye SÜRÜCÜ<sup>1</sup>**

### **1. INTRODUCTION**

SAP is a business process management software and database system that plays a critical role in the business world. There are some basic reasons why Companies prefer SAP. For example, SAP can be used in many different business processes of a Company and integrates these processes with each other, so decision makers can access all data in the Company under SAP, decide which processes are good, which processes need to be improved and even which processes are useless for the Company. The fact that SAP can be used in all organs of the Company allows SAP to have big data. In this way, SAP can analyze all this data and help make strategic and competitive decisions based on the data and use resources in the best way. SAP also demonstrates Global Compliance and Regulatory Compliance. SAP applications can be used whether it is a company or a company operating internationally. The fact that SAP can be used in different countries and different sectors also brings compliance with the financial and legal regulations in various countries.

SAP SD is a critical module that manages O2C activities in a company. SAP Fiori Platform is an interface that has been released in recent years and provides a modern user experience. In this research, the use of the SAP SD module with the SAP Fiori interface and the advantages and disadvantages of these SAP products were investigated.

The research also explores the differences between SAP Fiori and the conventional SAP Easy Access screen and their impact on user acceptance. It includes a case study of SAP SD implementation to evaluate the effectiveness of SAP Fiori Launchpad.

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<sup>1</sup> Marmara University, Faculty of Management, German Business Informatics, Sumeyyesurucu@marun.edu.tr, ORCID iD: 0009-0007-6897-5831

The findings of this study predict that SAP Fiori Launchpad can provide a variety of benefits to organizations, including improved user experience, increased productivity and better visibility, especially for “Startups”, those new to the IT world, consulting and existing employees. In this world. Overall, this study provides valuable information about the execution of SAP SD processes with SAP Fiori and the potential of SD processes.

## **2. SAP SALES AND DISTRIBUTION AND SAP FIORI**

SAP SD is an SAP product that companies have been using for years and SAP Fiori is an SAP product that has been released in recent years and has been widely used by companies since its release. Under this heading, these two SAP products and the benefits of using these products together will be examined

### **2.1. SAP SD**

SAP Sales and Distribution module is the module used to manage sales and distribution processes in the business. This module includes all processes from the creation of orders to their delivery to the customer. These processes can be grouped under 5 main headings: Order Management, Pricing, Product Distribution, Billing, Reporting and Analysis (Kühberger, 2018, 27-31). Starting from the first step, future sales can be predicted, resources can be planned, and the results of resource planning can be seen until the last step. The main functions of this module can be listed as follows:

**Order Management:** Customer orders are received and processed with the SAP SD module. In this process, operations such as pricing, stock control, order confirmation, when and where the products will be delivered are automatically carried out by the SD module.

**Pricing:** Prices of products can be determined using the SAP SD module. Campaigns, general or customer-specific discounts can be defined. (Kapil, 2010,155-206)

**Product Distribution:** with SAP SD processes, processes such as transportation planning, shipping documents and inventory management can also be followed.

**Billing:** Customer invoices, shipments and payments are automatically tracked with the SAP SD module. There are different pricing options and tax calculation features. Various payment methods are also offered to customers. (Then, 2017,173-203)

Reporting and Analysis: At the end of all the processes mentioned above, the sales data of the business can be analyzed thanks to the SD module.

The SAP SD Module offers both advantages and disadvantages when it comes to managing sales and distribution processes. On the positive side, the module operates in tandem with other SAP modules, allowing for a seamless integration of business processes. This integrated approach, coupled with the automation and enhancement of business operations, leads to heightened efficiency and maximized profits. Furthermore, the module's emphasis on customer relationship management bolsters customer satisfaction and fortifies customer relations.

However, there are challenges to consider. SAP applications, including the SD module, can be a significant investment, especially for small to medium-sized businesses. The intricate and multi-faceted nature of SAP SD means that users often need dedicated training, consuming both time and resources. Additionally, given that every business operates uniquely, there's sometimes a need to customize the SAP SD module, which can incur extra expenses. Generally, large-scale companies find the most value in SAP SD due to its power and comprehensive features. Still, businesses should weigh their specific needs and available resources before deciding on its implementation. (Bohren &ark,2022,79-252)

## **2.2. SAP Fiori**

SAP Fiori is a platform introduced by SAP in 2013 and developed to improve user experience. SAP Fiori helps to manage business processes in a user-friendly, efficient and effective way. There are many differences between it and the Easyaccess screen that has been used so far. The Easyaccess screen is text-based and often complex. In order to access a certain operation, it is necessary to enter the operation codes such as XD03, SE16 or the name of the operation. SAP Fiori offers a completely different understanding. Sap Fiori is web-based and intuitively designed, and offers applications to its users in a simple and understandable way, with a visually rich but at the same time simple design. It does not need to know any code to access a particular task. While the Easyaccess screen focuses on desktop use, Fiori offers a more mobile-friendly and versatile experience. This mobile device experience provides access to advisors from anywhere, so there is access to more up-to-date information.



Figure 1: SAP Fiori SD Mainmenu (SAP, 2023)

SAP Fiori, a contemporary interface solution, presents a myriad of merits and limitations that businesses must consider. One of its primary strengths lies in its user-centric design, which facilitates clearer, more efficient, and rapid management of business processes. This user-friendliness is a foundational principle behind Fiori's conception. Additionally, Fiori applications are inherently tailored for mobile devices, allowing users the flexibility to access data remotely, eliminating the dependency on traditional computer setups. (Englbrecht,2020,453-486) The efficiency of Fiori is further exemplified by its ability to expedite transactional processes. Moreover, it champions the standardization and consistency of business operations, which inherently minimizes errors and ensures a more controlled business environment. In the realm of technological advancements, Fiori acts as a linchpin, aiding businesses in their digital transformation endeavors and ensuring they remain at the forefront of technological competitiveness. Furthermore, Fiori's capability to provide dedicated portal access for stakeholders, such as customers and partners, underscores its potential in enhancing collaborative efforts and communication channels. (Anurag,2017,47-55)

However, the transition to SAP Fiori is not devoid of challenges. For traditional SAP users, Fiori introduces a novel experience, necessitating comprehensive training to ensure a seamless transition from legacy systems. This adaptation phase might temporarily impede productivity. The provision of mobile access, while advantageous, also raises data security concerns, mandating rigorous security measures. Additionally, to fully harness Fiori's capabilities, businesses might incur additional expenditures due to requisite hardware and software upgrades.

In essence, while SAP Fiori offers a plethora of opportunities for enterprises emphasizing user experience and modernization, it also presents certain challenges. Its modern interface, coupled with mobile adaptability, can significantly bolster customer satisfaction and inform competitive strategic decisions. Thus, for businesses aiming to refine their operational processes and secure a competitive edge, investing in SAP Fiori appears prudent. Nonetheless, it is imperative for businesses to judiciously assess the inherent challenges, such as user acclimatization, associated costs, and potential legacy system incompatibilities. A holistic evaluation of organizational needs and financial constraints should inform the decision to integrate Fiori. (Anurag,2017,69-92)

### **2.3. Integration of SAP SD module with SAP Fiori**

Integrating the SAP SD Module with SAP Fiori enhances business operations and boosts efficiency. One of the key aspects of this integration is adapting SAP SD processes to SAP Fiori applications. This adaptation is crucial because it enables users to operate more effectively and efficiently. The integration journey comprises four fundamental phases:

Firstly, there's a need to analyze existing business processes to determine which ones could benefit from a better user experience or which tasks should be made mobile-friendly. Secondly, the right Fiori applications that fit our requirements must be selected. Resources like the SAP Fiori application catalog or the SAP Fiori Apps Library can be consulted for this purpose. The SAP Fiori Apps Library offers a comprehensive list of available Fiori applications, allowing for a tailored selection based on specific needs. Additionally, the Fiori Cloud Demo, a cloud-based variant, offers a hands-on experience of SAP Fiori's functionalities.

Thirdly, Fiori applications can be customized to cater to the unique needs of different sectors. Tools like the SAP Fiori Designer or SAPUI5 technologies can be employed during this phase, ensuring that business operations run seamlessly. Lastly, training stands as a pivotal component of the SAP Fiori integration journey. Proper training ensures user acceptance and optimizes the efficiency derived from SAP users. (Engelbrecht, 2020, 419-453)

When comparing SAP Fiori to SAP SD, several distinct advantages emerge for Fiori. Primarily, Fiori is endowed with sophisticated reporting and analytical capabilities, which significantly aid businesses in making more informed decisions. Additionally, Fiori applications are designed to offer prompt access to crucial functions, streamlining operations. The design of Fiori applications also simplifies the process of bug detection and resolution, ensuring software

anomalies are addressed expeditiously. A noteworthy feature of Fiori is its commitment to ongoing refinement, driven largely by user feedback, ensuring the application remains attuned to user needs. Furthermore, Fiori's capability to dispatch proactive notifications enables users to swiftly respond to significant events, especially in domains such as customer orders and inventory management.

However, Fiori's advantages are not without accompanying challenges. The process of integrating pre-existing SAP applications with Fiori can, at times, be intricate and technically demanding. Additionally, the provision of mobile access in Fiori introduces potential data security vulnerabilities that businesses must be cognizant of. (Fitznar& Fitznar, 2021, 379-416)

### **3. SIMULATION OF THE SD MODULE WITH SAP FIORI**

In this part of the study, the order 2 cash transaction will be completed with SAP Fiori. As can be seen from the SAP Fiori screen, SAP Fiori has steps that completely cover this process. Here, starting from the customer offer, acceptance of the offer, discounts made on the offer, product quantity in the warehouse, delivery process, invoice creation and customer payment recording steps will be shown one by one. At the end of the process, it could be check whether there are any problems in our process thanks to the Documentation flow.

#### **3.1. Create a Customer Inquiry**

In the dynamic world of business operations, managing customer interactions efficiently is paramount. SAP SD (Sales and Distribution) offers a robust platform to streamline these processes, ensuring that businesses can cater to their customers' needs effectively. One of the foundational steps in this process is the creation of a customer inquiry. This not only sets the tone for future interactions but also ensures that customer data is organized and accessible. In the following section, we will delve into the specifics of creating a customer inquiry within SAP SD, highlighting the importance of maintaining accurate customer master data and the steps involved in the process.

Transaction: Maintain Business Partner

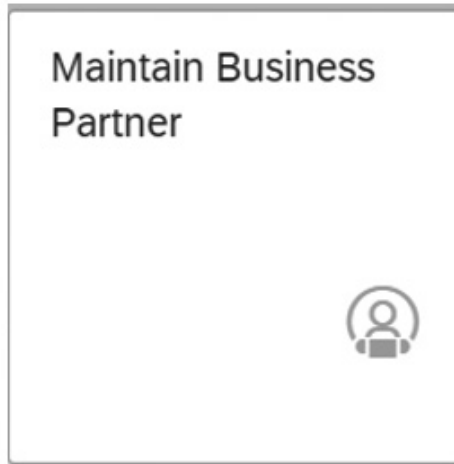


Figure 2: Maintain Business Partner Transaction in SAP Fiori (own illustration)

The Customer creation step in SAP SD (Sales and Distribution) describes the creation of customer basic data. customer master data is a key element of SAP SD as it stores important information about customers used in various business processes such as sales, order management, and customer information.

When creating a new customer, important information about the customer must be entered into the system. These include:

General Data: Contains basic information such as customer name, address, contact information and communication preferences. (Figure 3)

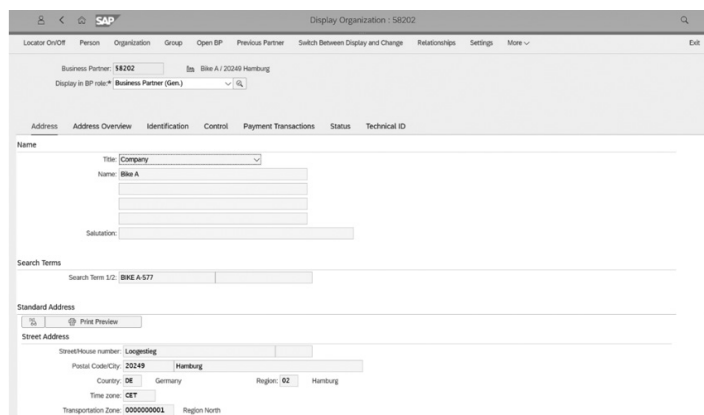


Figure 3: Customer Master Data in SAP Fiori (own illustration)

**Sales Area Data:** SAP SD supports the creation of customer-specific data for different sales territories. Sales areas are defined according to organizational structures such as company codes, sales channels and departments. In this step, specific pricing conditions, delivery preferences and payment terms are provided to the customer in each sales region.

**Accounting data:** Financial information about the customer, such as payment terms, payment methods and credit limits, is defined here. This data is critical for managing customer loans and receivables.

**Partner functions:** With SAP SD you can assign different partner functions to a customer. These partner functions represent different roles in the customer relationship, such as invoice receiver, goods buyer, or payer. (Figure 4)

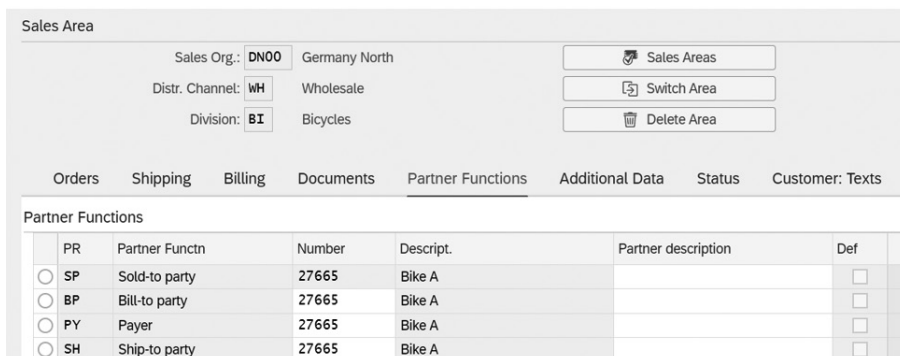


Figure 4: Partner Functions in SAP Fiori (own illustration)

Once the required information is entered, the customer record is stored in the system and a unique customer number is assigned. This customer master data serves as a reference for customer orders, deliveries and billing processes.

It is important to ensure that accurate and up-to-date customer master data is maintained in SAP SD as it impacts various business processes and ensures efficient order processing, customer communication and financial management.

### 3.2. Create Customer Inquiry

Inquiry means providing sales information without being binding on the customer. This may include product prices, discounts on bulk purchases, delivery methods or delivery dates.





(425.000 x 0,30= 127.500) Order probability can be determined separately for each company or each product.

For example, if we want to change the order probability for product ORWN1577, we only need to change the Order Probability of this product. This can be applied to one or more products or to the entire Invoice.

The screenshot shows the SAP Order Entry interface for Material ORWN1577 (Mountainbike Damen). The 'Order Probability' field is highlighted with a value of 70. Other fields include Net Value (125.000,00 EUR), Pricing Date (13.09.2023), and Order Quantity (50 EA). The 'General Sales Data' section is expanded, showing various order details.

Figure 7: Order probability change for ORWN1577 to 70% (own illustration)

After this step, it can be seen that the expected order value increases to 177.500 €. (Figure 8)

The screenshot displays two key data points: 'Valid To: 13.10.2023' and 'Expect.Ord.Val.: 177.500,00 EUR'. The expected order value is shown in a larger font and is highlighted in a grey box.

Figure 8: Increased Value of 70% order probability (own illustration)

After applying the same 70% rate to all products, the Expected Order Value will be 297.500 €.

When an Inquiry is registered in this way, a unique registration number is assigned by SAP. The number assigned for this Inquiry: 10000055

### 3.3. Create Customer Quotation

A Quotation is a formalized version of an Inquiry. Whereas an Inquiry has no binding force and is only for the purpose of obtaining information, a quotation is a document that is binding and uses the information obtained in the Inquiry.

Transaction: Manage Sales Quotations



Figure 9: Manage Sales Quotations transaction in SAP Fiori (own illustration)

A quotation can be created by referencing the Inquiry created on this screen (Figure 10)

Create with Reference ×

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Inquiry	Quotation	Order	Contract	SchedAgree	BillDoc
Inquiry:	<input style="width: 100%;" type="text" value="10000055"/>				
Requested Deliv.Date:	<input style="width: 50px;" type="text"/>	<input style="width: 50px;" type="text"/>			

Figure 10: Creating a Quotation based on the Inquiry (own illustration)

The copied Inquiry is shown as Quotation as follows (Figure 11)

Item	Material	Req. Segment	Order Quantity	SU	Altitm	Item Description
<input type="checkbox"/>	10 ORWN1577			50	EA	Mountainbike Damen
<input type="checkbox"/>	20 ORWN1577			125	EA	Mountainbike Herren

Figure 11: displaying the copied Inquiry as Quotation (own illustration)

Quotation is not at a point of no return at this step to increase customer loyalty or apply additional discounts and campaigns. For example, at this step, an additional discount of 50 € can be applied for each men’s bicycle and an extra discount of 5% on the entire invoice amount can be applied so that our customer can benefit from a campaign. As a first step, discounts on men’s bicycles can be applied. The men’s bicycle product can be selected and entered into the Item Conditions screen. In this step, a 50 € discount can be entered with the code K004 (material discount) on the screen. (Figure 12)

Pricing Elements						
<input type="checkbox"/>	I...	CnTy	Name	Amount	Crcy	per UoM
<input type="checkbox"/>	■	PR00	Price	2.400,00	EUR	1 EA
<input type="checkbox"/>			Gross Value	2.400,00	EUR	1 EA
<input type="checkbox"/>	■	K004	Material	50,00-	EUR	1 EA
<input type="checkbox"/>			Discount Amount	50,00-	EUR	1 EA
<input type="checkbox"/>			Rebate Basis	2.350,00	EUR	1 EA
<input type="checkbox"/>			Net Value for Item	2.350,00	EUR	1 EA
<input type="checkbox"/>			Net Value 2	2.350,00	EUR	1 EA
<input type="checkbox"/>			Net Value 3	2.350,00	EUR	1 EA
<input type="checkbox"/>	■	MWST	Output Tax	19,000	%	
<input type="checkbox"/>			Total	2.796,50	EUR	1 EA
<input type="checkbox"/>	■	SKTO	Cash Discount	0,000	%	

Figure 12: K004 Material Discount (own illustration)

The way to make a discount on the whole document is different. Instead of selecting all products individually, the entire document should be selected as shown in Figure 13.

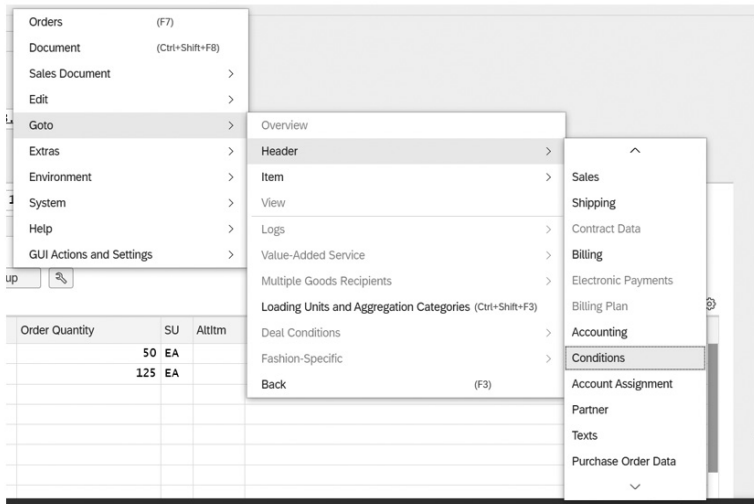


Figure 13: Discount on whole Document Step1 (own illustration)

With the code RA00 (% Discount from Net) a discount can be made on the whole document. Changes made on the whole document differ from changes made on a single product in that they need to be activated. While the K004 discount is applied directly, the RA00 code needs to be activated with the activate button. (Figure 14)

Condition Record

Activate Update

Pricing Elements

<input type="checkbox"/>	I...	CnTY	Name	Amount	Crcy	per	UoM	Condition Value	Curr.
<input checked="" type="checkbox"/>		PR00	ce					425.000,00	EUR
<input type="checkbox"/>			Gross Value					425.000,00	EUR
<input checked="" type="checkbox"/>		K004	Material					6.250,00-	EUR
<input checked="" type="checkbox"/>		RA00	% Discount from Net	5,000-	%			20.937,50-	EUR
<input type="checkbox"/>			Discount Amount					27.187,50-	EUR
<input type="checkbox"/>			Rebate Basis					397.812,50	EUR
<input type="checkbox"/>			Net Value for Item					397.812,50	EUR
<input type="checkbox"/>			Net Value 2					397.812,50	EUR
<input type="checkbox"/>			Net Value 3					397.812,50	EUR
<input checked="" type="checkbox"/>		MwST	Output Tax	19,000	%			75.584,38	EUR
<input type="checkbox"/>			Total					473.396,88	EUR

Figure 14: Discount on whole Document Step2 with RA00 (own illustration)

Discount content can be approved after checking.

SAP assigns a unique registration number for this Quotation registration. In this case Quotation Registration number is 20000024.

### **3.4. Create Sales Order Referencing Quotation**

If Bike A accepts the terms and conditions and the Quotation is approved, the order is created and as a result we need to copy the Quotation. The Sales Order Manage tab is used to create a Sales Order

Transaction: Manage Sales Order



**Figure 15:** Manage Sales Order Transaction in SAP Fiori (own illustration)

Here the Sales Order can be copied by referencing the Quotation number. (Figure 16)



**Figure 16:** Creating a Sales Order based on the Quotation (own illustration)

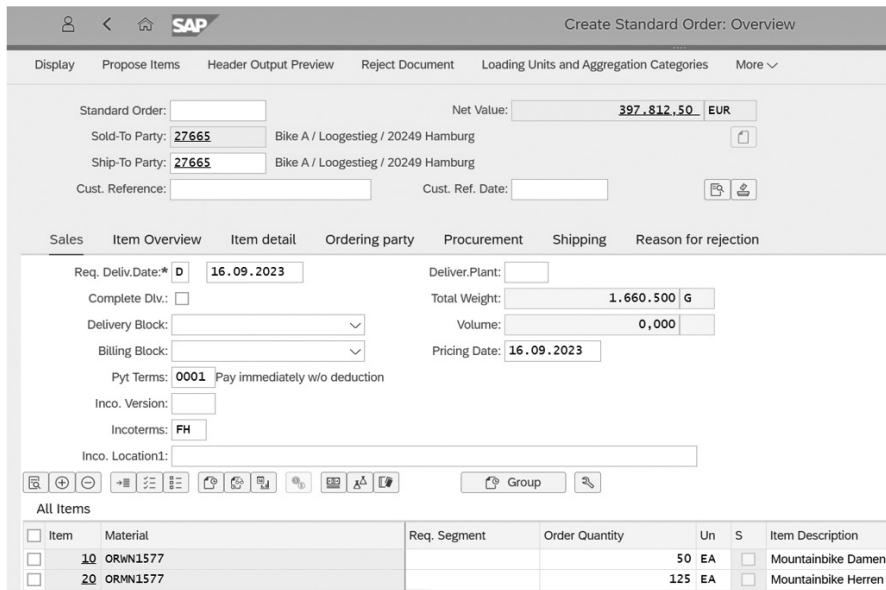


Figure 17: Sales Order Overview screen (own illustration)

After checking all the data, the Order can be created and a unique registration number will be assigned.

3029 is the unique standard order registration number assigned by SAP.

### 3.5. Display Sales Order

All sales orders created are listed here.

Transaction: List Sales Order

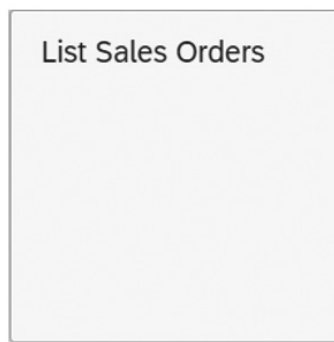


Figure 18: List Sales Order Transaction in SAP Fiori (own illustration)

All customer orders can be accessed via the Sold to Party number.

Customer Reference	Doc. Date	Sales doc. type	Sales document	Item	Sold-To	Material	Order Quantity (Item)
<input type="checkbox"/> 577	16.09.2023	OR	3029	20	27665	ORMN1577	125
<input type="checkbox"/> 577	16.09.2023	OR	3029	10	27665	ORMN1577	50

Figure 19: Sales Document List for Sold to Party (own illustration)

The details of the invoice content can be accessed by double-clicking on the products in Figure 19. (Figure 20)

Standard Order: 3029      Net Value: 397.812,50 EUR

Sold-To Party: 27665      Bike A / Loogestieg / 20249 Hamburg

Ship-To Party: 27665      Bike A / Loogestieg / 20249 Hamburg

Cust. Reference: 577      Cust. Ref. Date:

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Sales    Item Overview    Item detail    Ordering party    Procurement    Shipping    Reason for rejection

Req. Deliv.Date:\* D 16.09.2023      Deliver.Plant:

Complete Div.:       Total Weight: 1.660,500 G

Delivery Block:       Volume: 0,000

Billing Block:       Pricing Date: 16.09.2023

Pyt Terms: 0001 Pay immediately w/o deduction

Inco. Version:

Incoterms: FH

Inco. Location1:

Item    Material    Req. Segment    Order Quantity    Un    S    Item Description

<input checked="" type="checkbox"/>	10	ORMN1577		50	EA	<input type="checkbox"/>	Mountainbike Damen
<input type="checkbox"/>	20	ORMN1577		125	EA	<input type="checkbox"/>	Mountainbike Herren

Figure 20: Display Sales order via Sales Document List (own illustration)

Stock control can also be done using the display availability button on this screen. (Figure 21)

Period Totals    All details    Stock Overview    Stock in Detail    Totals Overview    Totals in Detail    Scope of check    More

Material: ORMN1577

Mountainbike Herren

Plant: HH00      Avail. check: 02      Check.rute: A

MRP Area: HH00      With reqmts qtys:       End lead time: 21.09.2023

Base Unit: EA

Totals display

Receipts: 350

Issues: 0      Confirmed issues: 0

ATP situation

Date	MRP e...	Stock Segment	MRP element data	Rec./reqd qty	Confirmed	Cum. ATP qty
<input type="checkbox"/> 16.09.2023	Stock			350		350
<input type="checkbox"/> 16.09.2023	SimReq		Simulated requirements	125-	0	350
<input type="checkbox"/> 16.09.2023	SLocSt		FG00	350		350

Current page / Total: 1 / 1

Figure 21: Stock control for Bike ORMN1577 (own illustration)



### 3.6. Starting Delivery

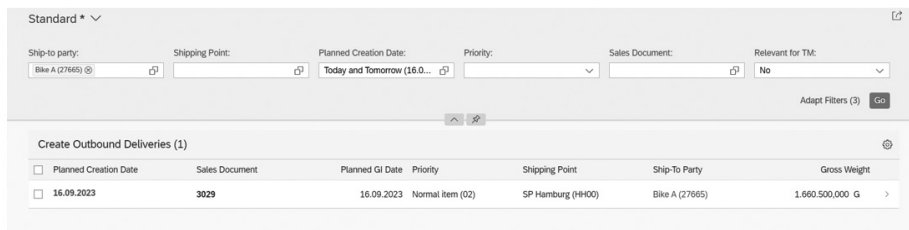
To start the delivery, a delivery must be created based on the sales order.

Transaction: Create Outbound Deliveries



**Figure 22:** Create Outbound Deliveries from Sales Orders Transaction in SAP Fiori (own illustration)

Delivery protocol can be created with the screen in Figure 23.



**Figure 23:** Creating Delivery Protocol (own illustration)

Also on this screen, the release date of the goods can be edited.

It should be noted that after creating a delivery, the sales order will no longer be visible on the screen. This avoids duplicate deliveries and prevents any confusion. (Figure 24)

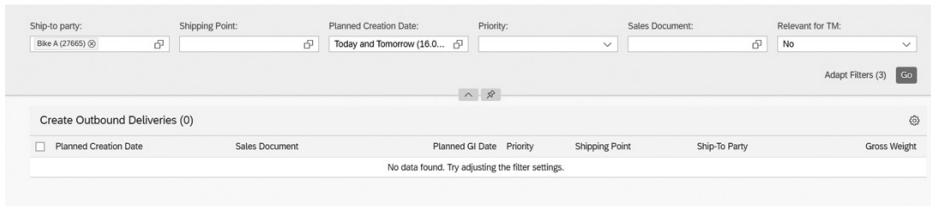


Figure 24: After Created Deliveries (own illustration)

### 3.7. Outbound Delivery Status

Output delivery is a document prepared to deliver a customer order to the customer. After this document is prepared, it shows the stage at which the exit delivery is, such as whether it is packaged, in transit, or delivered.

Outbound delivery status provides customers with information about when delivery will occur.

Transaction: Manage Outbound Deliveries

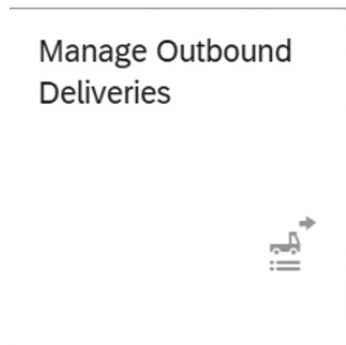


Figure 25: Manage Outbound Deliveries Transaction in SAP Fiori (own illustration)

As can be seen in Figure 26, the products for which delivery orders have been created in Figure 23 are currently ready for picking. Picking refers to picking products from a warehouse location and preparing the correct quantity and correct products for shipment.

Shipping Point: Picking Date: Ship-to party: Planned GI Date: Overall Status: Ready for Picking Adapt Filters (2) Go

Deliveries (1)

<input type="checkbox"/>	Outbound Delivery	Picking Date	Priority	Picking Status	Confirmation Status	GI Status	Pick
<input type="checkbox"/>	80002310	16.09.2023	Normal Item (OZ)	Not Yet Processed (A)	Not Relevant	Not Yet Processed (A)	<input type="button" value="Pick"/>

Figure 26: Delivery Orders are ready for Picking (own illustration)

When the Pick button is clicked, the Picking Quantity section must be checked and the correct numbers must be entered, as shown in Figure 27. This section is shown as 0 by default.

Delivery: 80002310

Actual GI Date: dd.MM.yyyy  
Planned GI Date: 16.09.2023

Gross Weight: 1.660.500 G  
Net Weight: 1.660.500 G

Picking Status: Not Yet Processed  
Confirmation Status: Not Relevant  
Show More

0 of 2 Picking > GI Not Ready 0

Delivery Items (2)

<input type="checkbox"/>	Item	Material	Delivery Quantity	Picking Qua...	Serial Nu...	Picking S...	Confirmat...
<input type="checkbox"/>	00001 0	Mountainbike Damen (ORWN1577)	50 EA	0 EA			
<input type="checkbox"/>	00002 0	Mountainbike Herren (ORMN1577)	125 EA	0 EA			

Figure 27: Checking Data for Picking (own illustration)

After checking the product numbers, the type of each product must be entered on the next screen. Here, one of the abbreviations that define the product, such as FG00 (Finished Goods), TG00 (Trading Goods), must be selected. (Figure 28)

Sales Order: 3029  
Sales Order Item: 000010  
Item Type: Standard Item (TAN)

Original Delivery Quantity: 50 EA  
Picking Quantity: 50 EA  
Delivery Quantity: 50 EA  
Conversion Rate: 1 EA : 1 EA  
Base Unit Delivery Quantity: 50 EA

Material: Mountainbike Damen (ORWN1577)  
Gross weight: 478.000 G  
Net Weight: 478.000 G  
Volume: 0  
Plant: DC Hamburg (H100)  
Storage Location: FG00  
Finished Goods  
Storage Bin:  
Material Availability: 16.09.2023

Figure 28: Storage Location Definition (own illustration)

As can be seen in Figure 29, Picking status has changed to GI Ready.

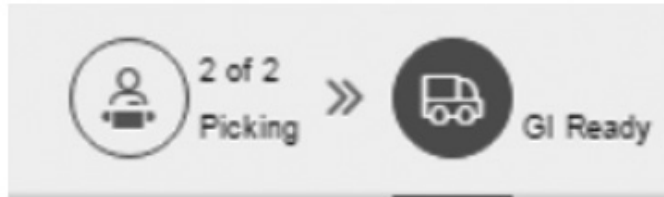


Figure 29: Picking Status Changed to GI Ready (own illustration)

### 3.8. Posting Goods Issue

To confirm the output of the goods, Manage Outbound Transaction must be used again. Posting goods issue means reducing inventory. This step is useful for keeping inventory records and stock management. The business performs this process when an output delivery is prepared and shipped to the customer.

Transaction: Manage Outbound Deliveries



Figure 30: Manage Outbound Deliveries Transaction in SAP Fiori (own illustration)

A screenshot of the SAP Fiori 'Manage Outbound Deliveries' transaction screen showing a table of deliveries. The table has columns for Outbound Delivery, Picking Date, Priority, Picking Status, Confirmation Status, GI Status, and Pick. The first row shows a delivery with ID 80002310, picking date 16.09.2023, priority Normal Item (02), picking status Completely Processed (C), confirmation status Not Relevant, and GI status Not Yet Processed (A).

Outbound Delivery	Picking Date	Priority	Picking Status	Confirmation Status	GI Status	Pick
<input type="checkbox"/> 80002310	16.09.2023	Normal Item (02)	Completely Processed (C)	Not Relevant	Not Yet Processed (A)	<input type="button" value="Pick"/> >

Figure 31: GI ready Orders (own illustration)

This time, Ready to Post GI should be selected on the screen. (Figure 31) Also, unlike Figure 26, the Picking Status has also changed. Additionally, since all the information is checked again in Step 7, the step is completed by simply clicking the Post Gi button in this step. No changes are needed.

### 3.9. Create Invoice for Customer

It is used to determine the cost of products or services sold to a customer and to send an invoice to the customer. It may occur when the order, delivery or service is completed. At this stage, the business determines how much the customer will be charged and the invoice details. Transaction: Create Billing Documents

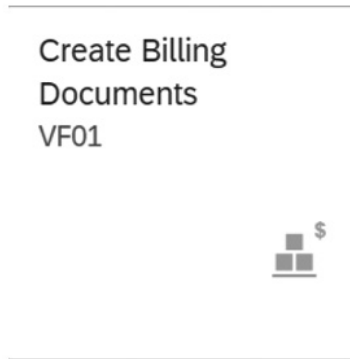


Figure 32: Create Billing Documents VF01 Transaction in SAP Fiori (own illustration)

On this screen, all invoices and sales belonging to any customer can be seen with the date and Sold to Party number and the Display Billing List Button (Figure 33).

ti	S	BICat	SOrg	Billing Date	Sold-To	BLIT	DstC	Document	DCN	Dv	Doc.Cat.	Address	Sold-To Pt	Sold-toLoc	Sort Term	Counter	SHPt	POD Status	Net Value	Curr
<input checked="" type="checkbox"/>	X		DN00	17.09.2023	27665	F2	DE	80002310	WH	BI	J	165304	Bike A	Hamburg			HH00		397.812,50	EUR

Figure 33: Invoices for Customer (own illustration)

By clicking on the Individual Billing Document in Figure 33, the content of the invoice, prices and taxes can be reviewed (Figure 34).

Invoice	\$000000001	Net Value:	397.812,50	EUR			
Payer:	27665	Bike A / Loogestieg / 20249 Hamburg					
Billing Date:	17.09.2023						
Item	Material	Item Description	Billed Quantity	SU	Net Value	Curr...	Tax Amount
<input type="checkbox"/>	10	ORMN1577	50	EA	118.750,00	EUR	22.562,50
<input type="checkbox"/>	20	ORMN1577	125	EA	279.062,50	EUR	53.021,88

Figure 34: Content of the Invoice 1 (own illustration)

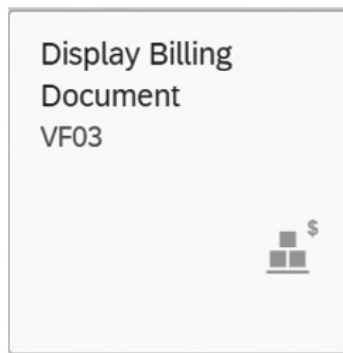
Invoice content can be approved after checking.

SAP assigns a unique registration number after the document is registered. The document number assigned after this registration is 90002081

### **3.10. Display Customer Invoice and Billing Document**

An invoice sent to the customer may need to be viewed again later for product / price control or for any other reason. For this, Display Billing Document transaction is used.

Transaction: Display Billing Document



**Figure 35:** Display Billing Document VF03 Transaction in SAP Fiori (own illustration)

The document number on which the Invoice Number will be written in the Billing Document section is the number of the document recorded in Step 9. (Figure 36)

A screenshot of the SAP Fiori search interface. At the top, there is a search bar labeled 'Billing Document:' with the value '90002081' entered and a magnifying glass icon to the right. Below this is a section titled 'More Search Criteria' with a horizontal line separator. Underneath, there are four input fields: 'Document Number:', 'Company Code:', 'Fiscal Year:', and 'Reference:'. At the bottom of the section is a button with a magnifying glass icon and the text 'Search'.

**Figure 36:** Display Billing Document via Document number (own illustration)

The entire content of the invoice can be seen on this screen. (Figure 37)

Item	Material	Item Description	Billed Quantity	SU	Net Value	Curr...	Tax Amount
<input type="checkbox"/>	10 ORWN1577	Mountainbike Damen		50 EA	118.750,00	EUR	22.562,50
<input type="checkbox"/>	20 ORWN1577	Mountainbike Herren		125 EA	279.062,50	EUR	53.021,88

Figure 37: Content of the Invoice 2 (own illustration)

The informations shown in Figure 37 (Content of the Invoice 2) and Figure 34 (Content of the Invoice 1) must be the same.

### 3.11. Post Receipt of Customer

After Bike A company reports its payment, this payment must be recorded in SAP.

Transaction: Post Incoming Payments

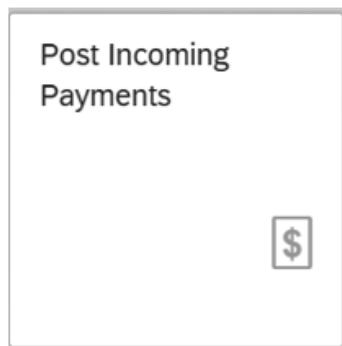


Figure 38: Post Incoming Payments Transaction in SAP Fiori (own illustration)

On the screen that opens, the payment method must be entered in the G/L Account section. (Like Bank, Post, etc.) 100000 Bank was selected, assuming that Bike A company made the payment through the bank. Another important information is to enter the amount paid correctly. In cases where the debt is not paid in full or the amount paid is entered incorrectly, it can be seen that the Balance section has a different value, as shown in Figure 39.

Balance: 373.396,88 EUR

<b>General Information</b> Company Code: DE00 Posting Date: 17.09.2023 Journal Entry Date: 17.09.2023 Value Date: 17.09.2023 Reference: Period: 09 Journal Entry Type: DZ (Customer Payment)		<b>Bank Data</b> *G/L Account: 100000 House Bank/Account ID: *Amount: 100.000,00 EUR Fees: 0,00 Assignment:		<b>Open Item Selection</b> Account Type/Account ID: Customer 27665 Payment Reference: Use this section to enter information (such as the invoice number, customer number, payment reference, or reason for payment) to help the system find the right items. Propose Items	
---	--	--	--	--	--

Proposed Items (473.396,88 EUR)    Post to G/L Account    Post on Account    Attachments (0)    Notes (0)

Open Items (1) Standard										Items to Be Cleared (1) Standard					
Compa...	Account	Journal E...	Journal...	Item Text	Journal E...	Net Due ...	Amount (...)	Assignment	Clear	Remove	Journal ...	Open A...	Allocate...	Discount...	Invoice R...
DE00	27665	90001955	RV		17.09.2023	17.09.2023	473.396,88	00900020...	✓	←	90001955	396,88	473...	0,000	

Figure 39: Underpayment of invoice amount (own illustration)

It can be seen that the Balance section is 0 in cases where the debt is paid in full, as shown in Figure 40.

Balance: 0,00 EUR

<b>General Information</b> Company Code: DE00 Posting Date: 17.09.2023 Journal Entry Date: 17.09.2023 Value Date: 17.09.2023 Reference: Period: 09 Journal Entry Type: DZ (Customer Payment)		<b>Bank Data</b> *G/L Account: 100000 House Bank/Account ID: *Amount: 473.396,88 EUR Fees: 0,00 Assignment:		<b>Open Item Selection</b> Account Type/Account ID: Customer 27665 Payment Reference: Use this section to enter information (such as the invoice number, customer number, payment reference, or reason for payment) to help the system find the right items. Propose Items	
---	--	--	--	--	--

Proposed Items (473.396,88 EUR)    Post to G/L Account    Post on Account    Attachments (0)    Notes (0)

Open Items (1) Standard										Items to Be Cleared (1) Standard					
Compa...	Account	Journal E...	Journal...	Item Text	Journal E...	Net Due ...	Amount (...)	Assignment	Clear	Remove	Journal ...	Open A...	Allocate...	Discount...	Invoice R...
DE00	27665	90001955	RV		17.09.2023	17.09.2023	473.396,88	00900020...	✓	←	90001955	396,88	473...	0,000	

Figure 40: Full payment of the invoice amount (own illustration)

The Order to Cash (O2C) process is completed.

### 3.12. Document Flow Review

The document flow presents all documents created during Bike A's ordering process.



Transaction: Material Documents Overview



Figure 41: Material Documents Overview Transaction in SAP Fiori (own illustration)

In this transaction, searches can be carried out by product name, year or customer. (Figure 41)

For Bike A, this list is as follows:

Standard \* v

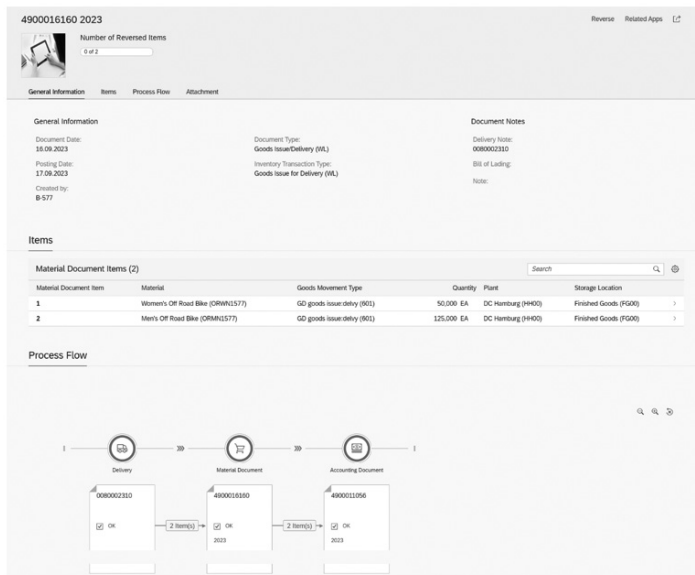
\*Stock Change: All Plant: Storage location: Stock Type: Material Document: Material Document Year: -2023

Material: 2 Items Posting Date: 17.09.2023 - 17.09.2023 Document Date: dd.MM.yyyy - dd.MM.yyyy Adapt Filters (4) Go

Material Document	Material Document Year	Material	Plant	Storage location	Posting Date	Stock Type
4900016160	2023	Women's Off Road Bike (ORWN1577)	DC Hamburg (0H00)	Finished Goods (FG00)	17.09.2023	Unrestricted-Use Stock (01)
4900016160	2023	Men's Off Road Bike (ORMN1577)	DC Hamburg (0H00)	Finished Goods (FG00)	17.09.2023	Unrestricted-Use Stock (01)

Figure 42: Material Document Flow for Bike ORWN1577 and ORMN1577 (own illustration)

By clicking on the products, the document flows of the products can be viewed. (Figure 43)



**Figure 43:** Exhaustive Material Document Flow for Bike ORWN1577 and ORMN1577 with Document numbers (own illustration)

#### 4. CONCLUSION AND RECOMMENDATIONS

In this study, focusing on the benefits of using the SAP SD process with SAP Fiori to businesses, it is supported with a simulation on the example Bike A company.

Using the SAP SD module with Sap Fiori is very important to offer businesses a more effective and user-friendly experience. This system can also significantly reduce training costs for new users. This offers businesses the opportunity to increase efficiency, accelerate business processes and easy access through both current and future users. For these reasons, it may be a positive development for businesses to consider switching to SAP Fiori.

However, SAP Fiori is not suitable for every company. For this, each company needs to decide within the framework of its own needs and possibilities. Requirements analysis is very important for an expensive business solution like SAP. For this, it is necessary to understand the needs and future plans of the business and evaluate user feedback.

It is also important to examine other SAP modules with which SAP Fiori can offer further integration opportunities. Thus, businesses can be helped to optimize all their processes. SAP Fiori allows different business modules to be

optimized and integrated throughout the organization. This means optimization and efficiency in all areas of the business.

Measuring in the future how well SAP Fiori works in different sectors and companies of different sizes will also be helpful to academics and managers who want to work with SAP Fiori in the coming years. Additionally, it may be necessary to quantify the benefits SAP Fiori provides to business processes and further analyze the effects of these benefits on business performance.

As a result, optimizing SAP processes can help businesses gain a competitive advantage and increase their operational efficiency. Using modern tools like SAP Fiori allows businesses to deliver a better customer experience and be more prepared for the future.

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