

# SAP Fiori UX Design and Build Challenge

Matthew Sardi

✉ [msardi23@gmail.com](mailto:msardi23@gmail.com) | [🐦 @msardi23](https://twitter.com/msardi23) | [in au.linkedin.com/in/matthewsardi](https://in.au.linkedin.com/in/matthewsardi)

# Story

## Segmentation

This application is focused on industries and customers where efficient and effective warehouse management processes are key to the ongoing success of the business. Specifically, the process of performing physical inventory counts which are mandated by financial accounting and tax regulations in many jurisdictions. As such, this application will apply to a large number of customers across a range of sectors such as retail, manufacturing, and mining.

## Targeting

The application is targeted solely at the warehouse manager and superintendent roles responsible for performing warehouse management activities such as regular or periodic physical inventory counts.

## Positioning

The main objective of the application is to improve the efficiency and accuracy of physical inventory counts. This will be achieved by reducing the number of manual steps required to perform physical inventory counts, removing the dependency on multiple SAP GUI transactions and unchaining the warehouse managers and superintendents from their desk.

# Persona

## Name & Job Title



- Walter White / Warehouse Manager

For me, I would like to improve the efficiency and accuracy of physical inventory counts in the warehouse I am responsible for.

## Background



- Male 50 years old; Married; Warehouse manager for 15+ years; Manages a team of 5+ Warehouse Superintendents; Proficient with new technology and mobile devices

## Job Responsibilities



- The safe operation of the warehouse
- Lead a team of superintendents in charge of performing day to day warehouse management activities

## Main Goals



- Reduce working capital by improving inventory management processes
- Improve the accuracy and quality of physical inventory counts

## Needs



- I need to improve the accuracy of physical inventory counts
- I need to improve the efficiency of my team
- I need to reduce the headcount in my organisation

## Pain points



- Current technology used to support the business process is cumbersome and time consuming
- It is difficult to train a young workforce familiar with consumer grade technology and user experiences
- There is currently a high turnover of warehouse superintendents

## Stakeholders



- Service Delivery Manager
- Warehouse Superintendents
- External Suppliers
- Internal Customers
- Procurment Organisation
- IS&T Organisation

## Competencies



Casual User	-----X-----	Power User
Proactive	---X-----	Reactive
Working in a team	---X-----	Lone Fighter
Global focus	-----X-----	Local focus
Innovative	---X-----	Conservative

# Current User Experience Journey

## Mindset

What is on the Persona's mind while taking the actions of their journey? How do they feel each step of the journey?

I need to get my team to do an inventory count... 😞

Man this computer is so slow!

Why is SAP GUI so ugly and hard to use?

Where is the list of SAP transactions I need to access for a physical inventory count?

What materials do I need to count?

What counts are already in progress?

Where is the printer? I hope it has not run out of paper again...

Ok let's start the count...

I wish I could read my teams handwriting? Should I go back and count that again to double check I have this right? Nah....

Thank god we are finally done! Wonder what we missed this time.

## Actions

What actions and activities does the Persona take while going thru the journey to achieve their goal?

Login to computer or kiosk (Manual)

Open SAP GUI (Manual)

Create the physical inventory document (SAPGUI MI01)

Print the physical inventory document (SAPGUI MI21)

Collect the document from the printer (Manual)

Walk to the relevant location in the warehouse (Manual)

Perform the count (Manual)

Enter the count into the system (MI04 or MI05)

Analyse discrepancies and perform recount where required (MI20)

Post the physical inventory document (MI07)

## Touch Points

What touch points does the Persona have? (Tools, channels, devices, conversations, and so on.)

Computer / Kiosk

SAP GUI

Paper

Printer

Pen

Warehouse

Personal Protective Equipment

*Duration of the Journey is dependent on number of materials to count*

# Prototyping Kit Mock-Up

Heisenberg ▼

Physical Inventory Documents

Search 🔍

- Document: 1000123 35  
Items  
**In Progress**

Planned: 23-Apr-15

Plant: Chicken Plant 1  
 Storage Location: Main Store
- Document: 1000140 5  
Items  
**In Progress**

Planned: 30-Apr-15

Plant: Chicken Plant 1  
 Storage Location: Main Store
- Document: 1000199 16  
Items  
 Not Started

Planned: 30-May-15

Plant: Chicken Plant 2  
 Storage Location: Main Store
- Document: 1000223 21  
Items  
 Not Started

Planned: 30-Jun-15

Plant: Laundry Mat 1  
 Storage Location: Main Store
- Document: 1000144 3  
Items  
 Not Started

Planned: 23-Aug-15

Plant: Laundry Mat 2  
 Storage Location: Main Store

Document 1000140 5,001,450.00

USD

Planned: 30-Apr-15

Plant: Chicken Plant 1  
 Storage Location: Main Store

Items to count (5)

Material	Book Value	Book Quantity	Count Quantity		
Crystal Blue (1000213)	5,000,000 USD	50 KG	<input style="width: 50px;" type="text" value="45"/>	KG	<span style="border: 1px solid #ccc; border-radius: 50%; padding: 2px;">✕</span>
Plastic Barrels (1000324)	100 USD	10 EA	<input style="width: 50px;" type="text"/>	EA	<span style="border: 1px solid #ccc; border-radius: 50%; padding: 2px;">✕</span>
Volumetric Flask (1000234)	250 USD	2 EA	<input style="width: 50px;" type="text"/>	KG	<span style="border: 1px solid #ccc; border-radius: 50%; padding: 2px;">✕</span>
Gas Mask (1000223)	100 USD	2 EA	<input style="width: 50px;" type="text"/>	KG	<span style="border: 1px solid #ccc; border-radius: 50%; padding: 2px;">✕</span>
Whole Chickens (1000431)	1000 USD	100 EA	<input style="width: 50px;" type="text"/>	KG	<span style="border: 1px solid #ccc; border-radius: 50%; padding: 2px;">✕</span>

Save
Post

A list of physical inventory documents assigned to the user, highlighting key information.

Summary of the physical inventory document (i.e. relevant header information)

Tab outlining individual items to be counted.

Remove individual materials from the document if required.

Create a new physical inventory document.

Ability to print the document if required.

Add items to count to the list below using a suitably size overlay / dialog

Save progress of the count.

Post the document for approval

# WebIDE Video Demonstration

<https://youtu.be/pj0BuHRP9VY>

The screenshot shows a mobile web application interface for physical inventory management. The top status bar indicates 'iPad', signal strength, '12:15 pm', and '73%' battery. The browser address bar shows the URL: `webidetestingaiswrs-p632417trial.dispatcher.hanatrial.ondemand.com`. The application header includes a 'Leave Request' button and the title 'PHYSICAL\_INVENTORY'.

The main content is divided into two panels: 'Physical Inventory Documents' on the left and 'Document Details' on the right.

**Physical Inventory Documents Panel:**

- Search bar with a magnifying glass icon.
- Document: 1000123, 35 Items, Planned: 23-Apr-2015, Plant: Chicken Plant 1, Storage Location: Main Store, In Progress.
- Document: 1000140, 5 Items, Planned: 30-Apr-2015, Plant: Chicken Plant 1, Storage Location: Main Store, In Progress (highlighted).
- Document: 1000199, 16 Items, Planned: 30-May-2015, Plant: Chicken Plant 2, Storage Location: Main Store, Not Started.
- Document: 1000223, 21 Items, Storage Location: Main Store.

**Document Details Panel (for Document: 1000140):**

- Document: 1000140, 5,001,450.00 USD.
- Planned: 30-Apr-2015.
- Plant: Chicken Plant 1.
- Storage Location: Main Store.
- 5 document icons and an information icon.
- Section: Items to Count (5).
- Table with columns: Material, Book Value, Book Quan..., Count Quantity, and a trash icon.

Material	Book Value	Book Quan...	Count	Quantity	
Crystal Blue (1000213)	5,000,000.00 USD	50.00 KG	45	KG	
Plastic Barrels (1000324)	100.00 USD	10.00 EA	9	EA	
Volumetric Flask (1000234)	250.00 USD	2.00 EA	2	EA	

The bottom navigation bar contains a settings gear, a document icon, a printer icon, a plus sign, a green 'Save' button, a red 'Post' button, and a share icon.