

## Design Thinking

### Story:

In a typical Oil and Gas industry, field worker goes to plant and perform work. Before going to plant there are several activities to be followed (Assuming Industry is using SAP Plant Maintenance module):

1. Work Order with its component (Functional location, Equipment etc.) gets created in SAP Backend
2. Work Order gets assigned to a particular field worker or a crew
3. If crew is using mobile device (Ex SAP Work manager) then they receive work orders on handheld or without mobile application they get print outs.
4. Next step is to obtain Permit to Work before entering to plant and to do so they perform below tasks:
  - (a) Fill permit to work form with the work order details and submit to supervisor. This is a duplicate effort of data entering.
  - (b) Go to the counter and stand in queue to submit the form
  - (c) After getting the form supervisor checks the filled details and confirms from SAP System. Again duplicate effort.
  - (d) Next day worker goes to counter and stand in a queue to collect the signed form. If not signed then repeat the process.
  - (e) After collecting the signed form move to plant
  - (f) At the entrance again there is a queue, inspector checks the signed form
  - (g) After checking worker is allowed to plant and execute the work

How to solve the duplication of effort and streamline the process?

SAP Fiori will be a savior of field worker and supervisor. Supervisor will be given a iPad with Fiori application Permit to Work.

How this application will work?

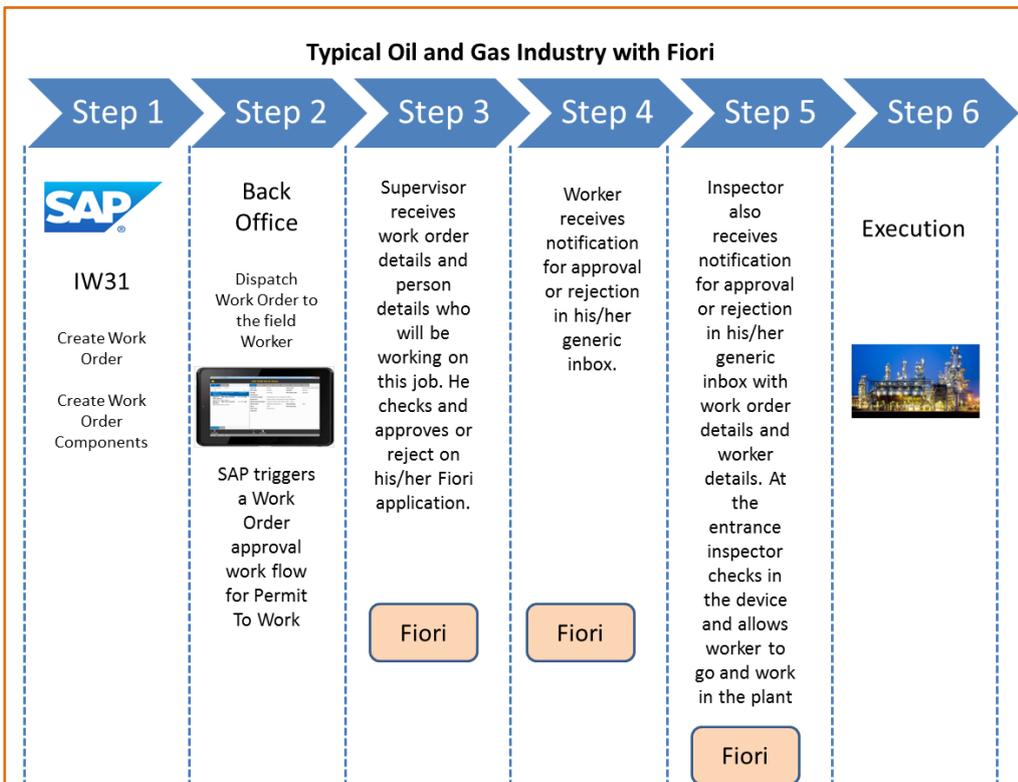
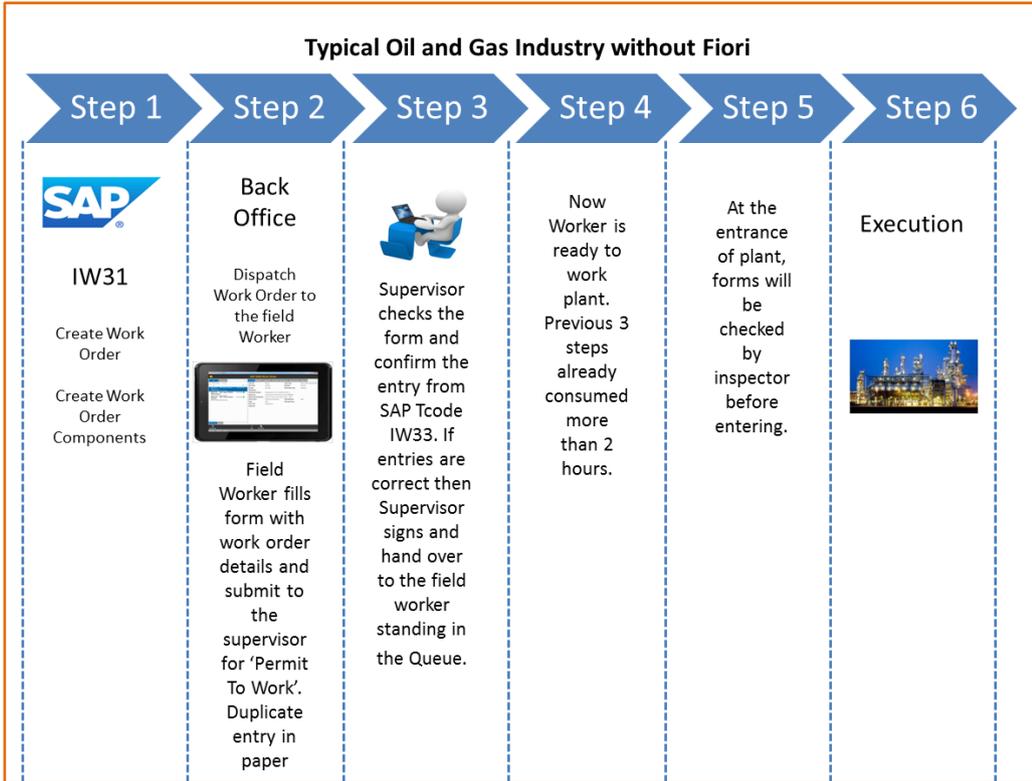
1. As soon as work order is dispatched to field worker then at same time permit to work request will be sent to supervisor with work order details and worker details. Manual filling of Permit to Work form can be eliminated.
2. Supervisor will launch the Fiori launch pad and open the Permit to Work application. He need not login to SAP to cross check the information because all the information is being sent from SAP backend itself.
3. Supervisor can then approves or rejects the Permit to Work request with comments
4. After the supervisor action, a notification will be sent to Field Worker and Plant inspector in their Fiori Generic Inbox.

### Conclusion:

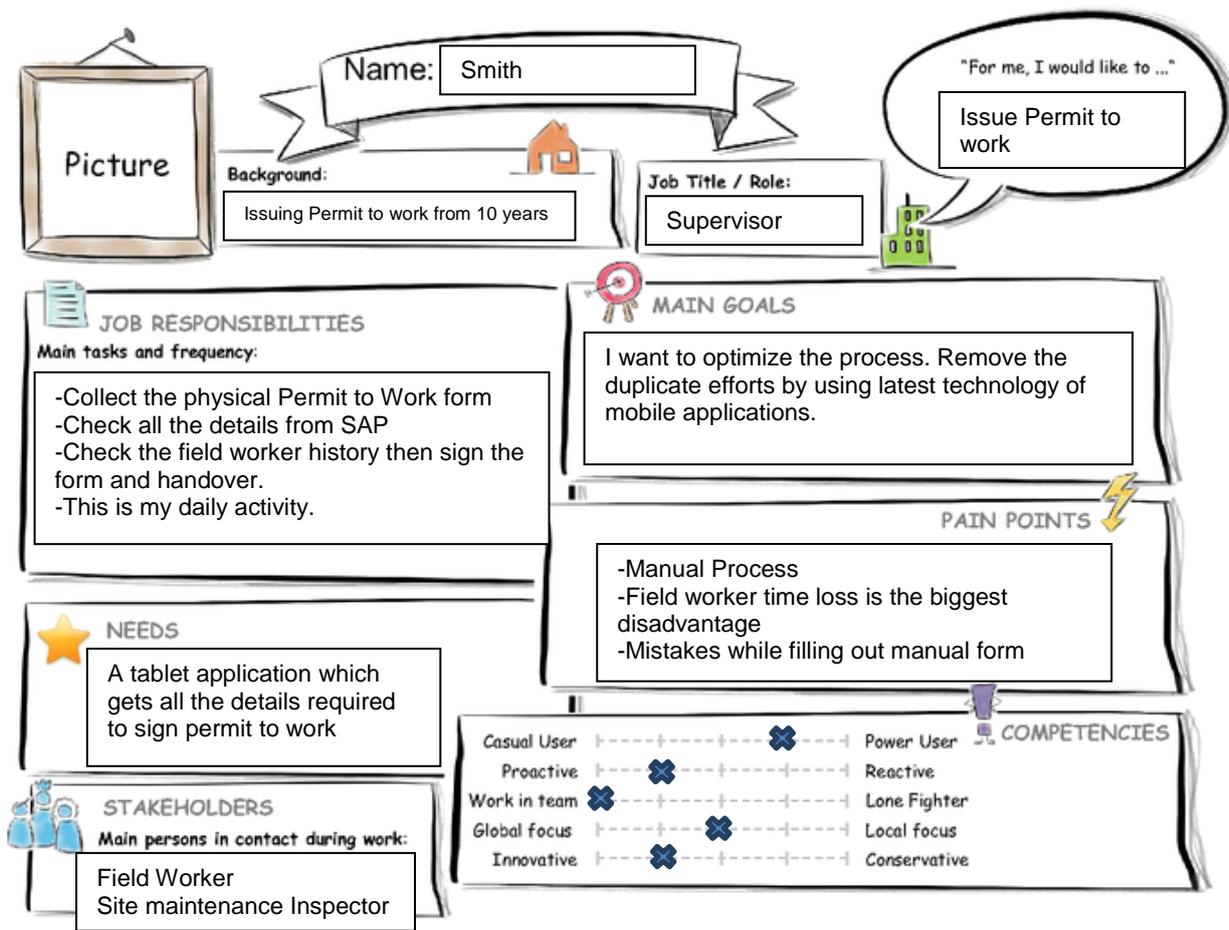
Huge time saving per man day by eliminating paper based manual work.



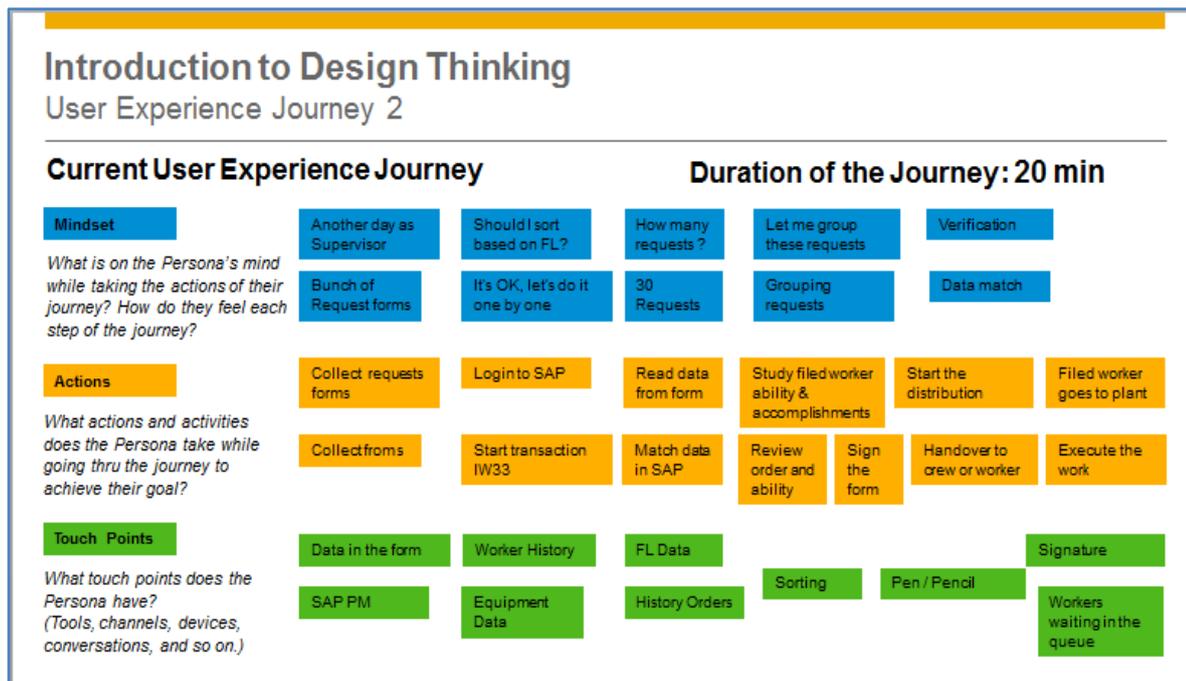
**Process Diagram:**



# Persona



# User Experience Journey:

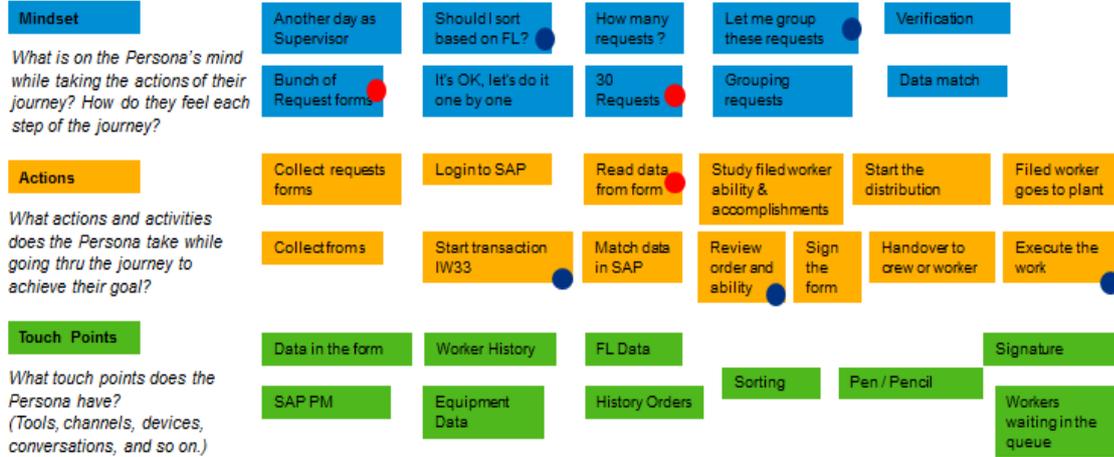


# Introduction to Design Thinking

## User Experience Journey 3

### Current User Experience Journey

Duration of the Journey: 20 min



## Mock Up:

Page 1:

Permit To Work Requests (10)

Search

Rudy	10000100	Edmonton Plant	3 Operation	Very High
William	10000200	South City	3 Operations	High
Mohan	10000300	River Bed	2 Operations	High
Jason	10000400	Ottawa	1 Operation	Medium
Peter	10000500	North City	4 Operations	Low

### Request

**William** 10000200

South City  
Very High

Work Order

Operations 3

Processor

Work Order Description: Quarterly Maintenance Order  
 Work Center: Dolphin Plant  
 Functional Location: [Gas Generator](#)  
 Equipment: [Gas Turbine](#)  
 Notification: [50000199](#)

Operations(3)

Number	Functional Location	Unit of work	Number of person	Total
Change Hydraulic Filter	<a href="#">PM-SC-FL1</a>	2	3	6
Grease Pump Drive Shaft	<a href="#">PM-SC-FL2</a>	3	4	12
Change Oil	<a href="#">PM-SC-FL3</a>	5	2	10

Approve
Reject

Permit To Work Requests (10)

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Request

**William**
10000200  
South City  
Very High

Work Order

Operations <sup>3</sup>

Processor

Name: [William Zankiee](#)  
 Work Group: **Maintenance**  
 Designation: **Assistant Foreman**  
 Rating: ★★★★★

**William's Work History**

Task Description	Work Order	Year	Work Completion	Feedback
Change Conveyor Belt	<a href="#">30000200</a>	2014	★★★★★	★☆☆☆☆
Maintain Assembly Line	<a href="#">40000100</a>	2014	★★★★★	★☆☆☆☆
Clean PWR Shuttle	<a href="#">20000500</a>	2015	★★★★★	★☆☆☆☆

Approve
Reject

## SAP Web IDE App

Permit To Work Requests (10)

Search

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Request

**William**
10000200  
South City  
Very High

Work Order

Operations <sup>3</sup>

Processor

Work Order Description: **Quarterly Maintenance Order**  
 Work Center: **Dolphin Plant**  
 Functional Location: [Gas Generator](#)  
 Equipment: [Gas Turbine](#)  
 Notification: [50000199](#)

**Operations(3)**

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Approve
Reject

Large 100% x 100%
Medium 800 x 600
Small 320 x 480
Custom 480 x 600
Refresh Orientation

← Permit To Work Requests (10) ☰

Search 🔍 ↻

<b>Rudy</b>	<b>10000100</b> Edmonton Plant
3 Operation	Very High
<b>William</b>	<b>10000200</b> South City
3 Operations	High
<b>Mohan</b>	<b>10000300</b> River Bed
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1 Operation	Medium
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4 Operations	Low

## Request

William

**10000200**  
 South City  
 Very High

📄  
 Work Order

📅 <sup>3</sup>  
 Operations

👤  
 Processor

Name: [William Zankiee](#)

Work Group: **Maintenance**

Designation: **Assistant Foreman**

Rating: ★★★★★

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Approve
Reject
📄