| e-ISSN: 2319-8753, p-ISSN: 2320-6710| <u>www.ijirset.com</u> | Impact Factor: 7.512|

||Volume 9, Issue 6, June 2020||

# A Study on SAP Fiori Apps and Fiori Design Principles

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**ABSTRACT:** Originally, SAP cultivated Fiori apps along with the Renew tactic in mind though producing a new UX for the existing and very most generally used service cases in SAP software. Yet later, this method evolved into a brand-new conventional UX technique for all SAP program. Along with the release of S/4HANA, SAP is relocating closer to its objective of "one UX for all SAP answers."

KEYWORS: Fiori apps, design principles, sap ux strategy and the sap fiori ux

# I. INTRODUCTION

As mentioned previously, Fiori was established based on the HTML5 framework, with an emphasis on a standard UI concept as well as user-centric apps. This aided SAP generates a reactive UI that's compatible with all screen dimensions and also works on any sort of gadget that has an HTML5-compatible internet browser. Fiori was cultivated based on the concept principles displayed in Figure 1:



### Role-based

• Each app is specific to a user's role: manager, employee, salesperson, and so on.

• The role-based approach helps in developing user-centric apps.

• A user may have multiple roles. Depending on the nature of their responsibilities, the same user may perform different tasks across multiple business domains. Apps that are developed to carry a specific task that belongs to different modules (HR, SRM, CRM, and so on) can be assigned to users based on their roles.

# Developers can visualize a specific user's task and develop a UI that relates to the nature of the user's work.

### Responsive

• Because it's HTML5-based, Fiori works seamlessly across all screen sizes and devices that have an HTML5-compatible browser.

- Fiori apps adjust their layout based on the available screen real estate.
- Fiori supports multiple interaction modes, such as keyboards, mice, and touch-based inputs.

• Fiori works independently of platform or ecosystem (Windows, Android, or iOS). The apps work and respond the same across all platforms.

### Simple

- The simple UI helps the user complete tasks quickly and easily.
- Fiori apps emphasize a 1:1:3 approach: one user, one use case, and three screens (desktop, tablet, and mobile).

# Coherent

• No matter how many apps Fiori has, they all have the same design footprint and thus the same look and feel.



| e-ISSN: 2319-8753, p-ISSN: 2320-6710| <u>www.ijirset.com</u> | Impact Factor: 7.512|

# ||Volume 9, Issue 6, June 2020||

• This helps users become familiar with Fiori apps. After using one Fiori app, users feel comfortable with other Fiori apps, because every app speaks the same design language.

#### Instant value

• The time required to train users in the new UI is minimal for Fiori. The UI is simple and follows the same design pattern across apps, which makes it easier for users to adopt the new UI quickly. Hence the cost of training users is also minimized.

# II. SAP UX STRATEGY AND THE SAP FIORI UX

The new UX for SAP streamlines the old GUI and also makes it appropriate along with any type of tool of any type of screen size that sustains HTML5, including cell phones. This modification was a large measure for SAP-- it adopted an entirely brand-new innovation as well as the strategy for its User Interface.

# SAP UX Strategy

Enterprise resource planning software program was created to supply increased capability. Although ERP answers possess effective components, final user occasionally finds the UI complicated as well as also daunting. Many of the amounts of time, consumers do not use ERP software program based on its components and also its capability to deal with challenging duties; they give priority to User Interface convenience of use as well as the capability to finish their required jobs with the minimum volume of attempt.

As an example, look at Facebook. A customer may locate it user-friendly the Facebook website when they have access to a desktop or even laptop. However, when the customer is on the move, accessing the same entirely featured web site via a mobile device can be sophisticated as well as annoying. Utilizing the Facebook mobile phone application provides the individual with a simpler UI and also much easier design to improve their status, examination notices, find what their close friends fall to, and so forth. The most highly effective as well as advanced UI is not regularly the most effective explanation for supplying customers with a really good UX. For this reason, SAP placed its consumers first and also established an instinctive, steady, straightforward UX. It conserves consumers time as well as enhances their performance. The UX provides perks like these:

Fewer consumer errors

Reduced user training prices

Greater complete satisfaction rates

To obtain the objective of providing this enriched UX, SAP has 3 major regions of emphasis:

New: It's all about giving consumer-grade user knowledge for new applications.

Revive SAP supplies a better UX for its existing applications. As a beginner, SAP-based the Fiori apps on several of one of the most often used SAP applications.

Allow: SAP assists its companions, as well as consumers, enhance the UX of other existing SAP software program.

With SAP Fiori, apps are developed from a user's standpoint: the apps are user-centric. These apps are simple, pertinent to a certain user job, and also made to accomplish details jobs as well as tasks. Fiori apps crack the major, standard SAP purchases into various small, user-friendly apps that help make additional feeling to individual users (view Figure 2).

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||Volume 9, Issue 6, June 2020||



Figure 2: Standard transaction converted into smaller, simple, role-based, user-centric Fiori apps

Along with possessing apps for details duties, along with Fiori, the consumer has accessibility to a line of apps based upon the duties that specific user takes care of. For instance, suppose an individual is handling several tasks in a company: the user is a staff member but also permits finance-related tasks as a manager. As a supervisor, the consumer needs accessibility to particular approval-related apps; and also as a staff member, the customer requires to ask for vacation, improve timesheets, provide claims for travel costs, and so on. Fiori gives the end customer a single point of entry to gain access to all apps applicable to their roles: the Fiori launchpad. When individuals visit the Fiori launchpad, they view all the apps that have been licensed for them, based upon their tasks (see Figure 3).



Figure 3: Sample Fiori launchpad running on a tablet



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# **III. SAP FIORI APPS**

SAP Fiori apps are divided into three categories. They are distinguished on the basis of their function and infrastructure requirement.

- Transactional Apps
- Fact sheets
- Analytical Apps

# **Transactional Apps**

The most important features of Transactional Apps are:

• The first release of SAP Fiori included 25 transactional apps.

• Transactional apps in SAP Fiori are used to perform transactional tasks like a manager-employee transactions such as leave request, travel requests, etc.

• Transactional Apps run best on SAP HANA database but can be deployed with any database with acceptable performance. These apps allow a user to run simple SAP transactions on the mobile devices as well as desktop or laptops.

**Example**: Leave Request, Travel Request, Purchase Order.

# Fact sheets

The important features of a Fact sheet are given below.

• Fact sheets are used to drill the key information and contextual information in business operations. In SAP Fiori tiles, you can drill down to further details.

• It also allows you to navigate one-fact sheet to all its related fact sheets.

• Fact sheets also allow you to navigate to **Transactional apps** to run SAP transactions. A few Fact sheets also provide an integration option of geographical maps.

• You can call Fact sheets from Fiori Launchpad search results, from other fact sheets or from Transactional or Analytical apps.

• Fact sheets only run on SAP HANA database and also require an ABAP stack and they cannot be ported to SAP HANA Live tier-2 architecture.

**Example:** There is a fact sheet app with the center objects having details about vendor contract. You can drill down to further details like vendor details, contract terms, item details, etc.

### Analytical Apps

Analytical apps are used to provide role-based real time information about the business operations. Analytical apps integrate the power of SAP HANA with SAP business suite. It provides real time information from large volume of data in front-end web browser.

Using Analytical apps, you can closely monitor Key Performance indicators KPIs. You can perform complex aggregations and calculations of your business operations and react immediately as per the changes in the market condition.

SAP Fiori Analytical apps run on SAP HANA database and use Virtual data models.



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# Examples

<sup>Controller</sup> ¥s€	Activity Type	Statistical Key Figure	Controlling Document	Cost Center	Cost Center Group	Cost Element
	Cost Element Group	Customer Accounting Document	Profit Center	Internal Order		
G/L Accountant ¥\$€	Fixed Asset	G/L Account	G/L Accounting Document			Transactional
Accounts Payable ¥€	Supplier Accounting Document					Analytical Factsheet
Accountant $\Psi$					SA	P Smart Business

# SAP Fiori Apps for Finance



### SAP Fiori Apps for Human Resource

Release Production Orders Report Quality Issue	My Quality				
Report Quality Issue	My Quality				
	Tasks				
nspection Lot	Inspection Operation	Inspection Point	Master Inspection Characteristic	Inspection Method	Quality Notificatio
Quality lotification tem	Quality Notification Task	Quality Notification Activity			
Planned Order	Production Order	Process Order	Work Center	Resource	
			(	Transactional	apps
				Analytical Ap	ops
				Fact Sheets	3
	uality otification am lanned rder	uality otification m Task lanned Production order	aality Quality Notification Notification m Production Iaaned Order Order Order	aality Quality Notification Notification I Task Quality Notification And Production Order Order Work Center	aality otification maximum Zuality Notification Activity Ianned order Production Order Process Order Work Center Resource Transactional Analytical Ag Fact Sheet Smart Busin

# **SAP Fiori Apps for Manufacturing**

# SAP Fiori Architecture: App Types

SAP Fiori apps are separated into 3 categories. They are set apart on the manner of their function and framework need. As mentioned previously, Transactional apps in SAP Fiori does certainly not essentially call for SAP HANA data bank to operate and can run on any sort of data source. Simple Fact Sheets, Analytical apps as well as Smart Company run just on SAP HANA data bank without exemptions.



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||Volume 9, Issue 6, June 2020||

The account offered listed below shows SAP Fiori Architecture for SAP Fiori different apps styles.



Fact Sheets require to Explore designs to conduct search ability in Fiori Apps. Truth pieces are utilized to drill the vital relevant information as well as contextual info in business functions. In SAP Fiori tiles, you can punch to additional details. It additionally enables you to navigate from one simple fact slabs to all its related truth slabs.

Analytical apps and also Smart Company apps records originate from HANA data bank using HANA XS Engine.

HANA Live web content contains Virtual Information Design reuse web content, which could be utilized for extensibility function.

The user positions ask for via Web browser utilizing HTTPS. Relied on RFC is utilized to communicate between ABAP Front-End and also Back-End server.

# IV.CENTRAL HUB DEPLOYMENT OF SAP NETWEAVER GATEWAY

In this particular certain choice, Entrance internet hosting server efficiencies are made use of on one devoted hosting web server, the centre unit. As versus the first option, company launch happens on the facility device.

This opportunity is utilized if either no innovation should be done on the back-end body or even in the unlikely event of launches just before 7.40. if it is not allowed to deploy the Add-On IW\_BEP in the back-end. In this scenario, the developer is limited to the user interfaces that happen to make use of RFC in the back-end.

Progress happens in Portal centre tool and Service established back-end body systems are not touched.

*****	HTTP
Sateway Hub	and the second
OData Runtime & OData Design	n Time & Service Provider Runt
GW_CORE and IW_FND or SAP_GWFND	W_BEP or SAP_GWFND
SAP Business Suite	RFC



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IW\_BEP or SAP\_GWFND is running in Gateway hub system and nothing is touched in SAP Business suite.

#### Advantages

• In addition to the benefits given for the first option, this option has the advantage that it does not require the installation of Gateway Add-Ons in back-end system.

### Disadvantages

- There is no direct access to **metadata** (**DDIC**) and business data. Therefore, reuse of data is limited.
- GENIL objects cannot be used remotely.
- In this configuration, access is limited to remote enabled interfaces like RFC modules, BAPI's etc.

### V. EMBEDDED DEPLOYMENT

In Embedded release architecture, progression happens in SAP Company suite back-end system as well as Gateway body is likewise set up in the same device Providers are registered along with posted in the SAP Service Set back-end system.

	Consumers		
	CAD Burinese Cuite		HTTP
-	OData Rustima & Dasian Time	A Sanda Denilder Duntime	
	GW_CORE and IW_FND or SAP_GWFND	W_BEP or SAP_GWFND	
		RFC BOR BW WF	

**IW\_BEP or SAP\_GWFND** is running in the same system in which SAP Business suite is installed. Advantages

• It requires less run time as one remote call is reduced.

### Disadvantages

- System should not be used as hub for additional Back-End systems.
- In case of multiple SAP Business Suite systems, Gateway has to be configured multiple times.
- This configuration is recommended only for sand box purposes.

**Note:** You ought to not make use of an SAP Business Set Unit along with inserted implementation as a central system for extra back-end unit. The cause is actually that it might trigger a scenario where the SAP NetWeaver Gateway release of the centre unit is less than the variation of the SAP NetWeaver Gateway back-end parts of the remote control back-end unit.

To stay clear of such a scenario, you may utilize an embedded implementation option for your SAP Organization Set systems.

If you go for a hub-based architecture, you should utilize a devoted SAP NetWeaver Gateway Hub unit that must work on the most up to date launch of SAP NetWeaver Gateway.

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# | e-ISSN: 2319-8753, p-ISSN: 2320-6710| <u>www.ijirset.com</u> | Impact Factor: 7.512|

# ||Volume 9, Issue 6, June 2020||

# VI. CONCLUSION

SAP Fiori started along with 25 applications which were based on regularly used transactions as well as processes in SAP. Today Fiori possesses more than five hundred apps, as well as its own, still growing. And also along with the launch of S/4 HANA, SAP is relocating closer to their objective of replacing the aged GUI along with a brand-new UX standard established by Fiori for all its products. Fiori is being widely allowed through SAP consumers everywhere around the planet.

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