



Pick the right SAP UI/UX offering for your business



Ravindra Khaladkar & Shweta Nargachhe

Abstract

Today, a delightful user experience is critical for business success. Every new application is judged by its ability to offer an intuitive user interface (UI) and a pleasant user experience (UX). Additionally, customers evaluate the quality and value of an application based on the user experience. However, user experience expectations vary with individuals, devices and prior system experience. Thus, the demand in any market is for efficient and easy-to-use software.

SAP has renewed its focus on UI/UX and has developed several new alternatives to traditional SAP GUI. As these applications offer various features and benefits, many SAP customers are unaware of which application best fits their requirements. This paper takes a look at the various SAP UI platforms and tools available and evaluates options based on specific business scenarios.

SAP's top five UI technologies

Early on, SAP had developed user interfaces using Dynpro – a thick, graphic user interface (GUI) based client. Later, as the company evolved, web browser-based applications were used on NetWeaver platforms such as Web Dynpro for ABAP, Web-Dynpro for JAVA and SAP GUI for HTML. As user interface (UI) technologies matured, so did the tools used for design and development. Today, some of the popular SAP UI offerings include UI5, Fiori, Persona, Lumira, native mobile applications, open-ended technologies, and more. Let us explore the key features of these five SAP UI offerings and compare them across various parameters.

Fiori/SAPUI5

SAP Fiori is the new and enhanced user experience offering that imbibes the latest design principles. Device-independent and adaptive Fiori applications are easy to use, role-based and easily configurable. They are accessible through a central dashboard called the LaunchPad. While Fiori is the

strategic UI platform for S/4HANA, a Fiori-like application can also be built using SAPUI5. These are lightweight applications that unify the user experience and enhance user productivity. These custom apps can be developed on-premises using development environments in Eclipse, SAP Web IDE or SAP HANA Cloud Platform (SAP HCP). There are four types of Fiori

applications — transactional, analytics, factsheet, and smart business.

Enterprises with systems using ECC 6.0 EhP7+ server versions can easily set up Fiori and configure a transaction application. Fiori provides a modern user experience and aligns well with SAP's future strategy for UI/UX.



Figure 1: Typical Fiori launch-pad



Screen Personas

Screen Personas personalize SAP enterprise resource planning (ERP) screens by removing/rearranging fields, converting free text to drop-down menus, automating recurring key strokes, and pre-filling user value fields. Persona configurations and deployments need minimal or no coding. In fact, the latest version of Persona does not need add-ons such as Microsoft Silverlight and works on any browser. It also offers scripting to automate and consolidate several user actions into a single automated one. For customers that want to improve user productivity with minimal investment by using light clients and existing ERP developments as web applications, Persona is the most suitable solution. Persona complements SAP Fiori to enhance the user experience.



Figure 2: Example of Screen Persona transformation from SAP UI screens



Business Objects Lumira

SAP BusinessObjects Lumira provides a valuable approach to data discovery where users can slice and dice data based on their requirements. It helps in reporting and building analytics dashboards without coding. Lumira is an effective story builder and integrates seamlessly with SAP technologies such as SAP HANA data source and business intelligence platforms. Featuring a rich library of chart types, this tool is best suited for businesses where users need to generate reports and dashboards with minimal effort and time.

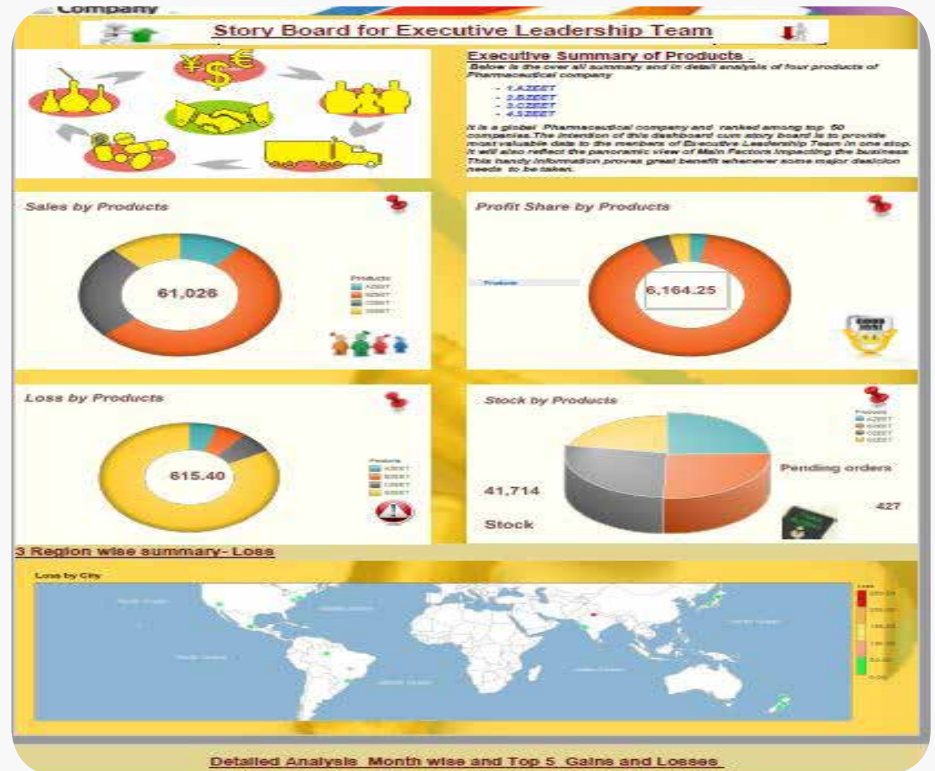


Figure 3: A Lumira storyboard

Floorplan Manager

Floorplan Manager (FPM) is a highly configurable UI framework that is based on Web Dynpro ABAP. Web Dynpro can be used to build transactional, web-based and desktop UI applications as well as complex SAP business transactions on thin clients. To achieve this, FPM provides the framework in Web Dynpro to facilitate wizard-driven UI design with minimal coding. It uses the Flexible User Interface Designer (FLUID) editor to configure Web Dynpro application. It has a rich UI with inbuilt search, find and filter list, generic user interface building block (GUIBB) and HTML islands and charts with HTML controls.

Customers that use lower versions of SAP, which are not compatible with Fiori/Persona, and are looking to build web-based applications can choose Web Dynpro. Alternatively, customers that embrace latest technologies such as SAP Fiori can seamlessly integrate existing Web Dynpro applications with SAP Persona or SAP Fiori.

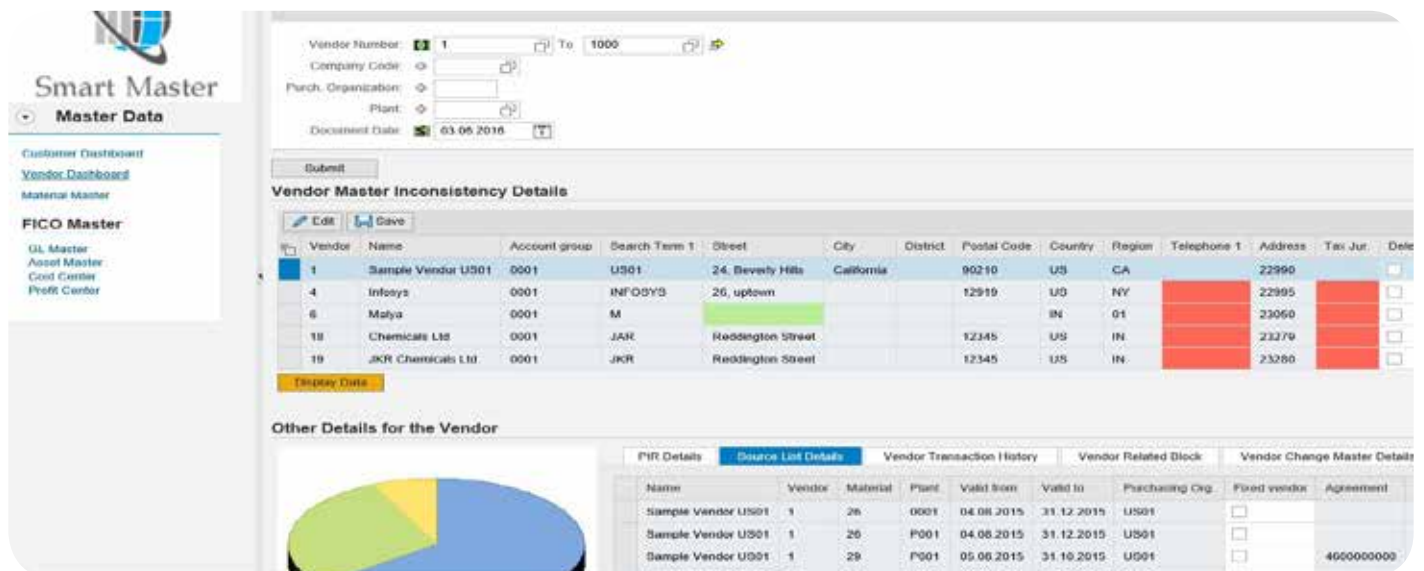


Figure 4: A screenshot from the Floorplan Manager application



Mobile Platform

SAP Mobile Platform (SMP) helps customers create applications that are compatible with mobile devices. As it is governed by user requirements or types, it enables organizations to develop three main types of applications – mobile web, native and hybrid. However, organizations must first understand what application type can efficiently address their UX requirements.



Mobile Web

- Typically, these work on browsers that support HTML and JavaScript (Fiori apps are browser-based) and run mostly on all devices/browsers. This simplifies app distribution as there are no specific OS dependencies
- Best-suited for enterprises that do not need a rich UI such as retail mobile apps but require a reasonably good user experience
- This is a popular option for enterprises and has driven significant adoption for Fiori apps



Native






- Native applications are built using operating system-specific libraries (Android, iOS, etc.) and APIs SDK
- Provides higher flexibility, more features and a rich UI. It enables developers to use device-specific resources
- Apps need to be released for each mobile OS; teams must have OS-specific development skills and development effort is higher
- Apps can be downloaded from app stores. Enterprises that want rich UI, better memory management, offline capabilities, etc., can opt for native apps

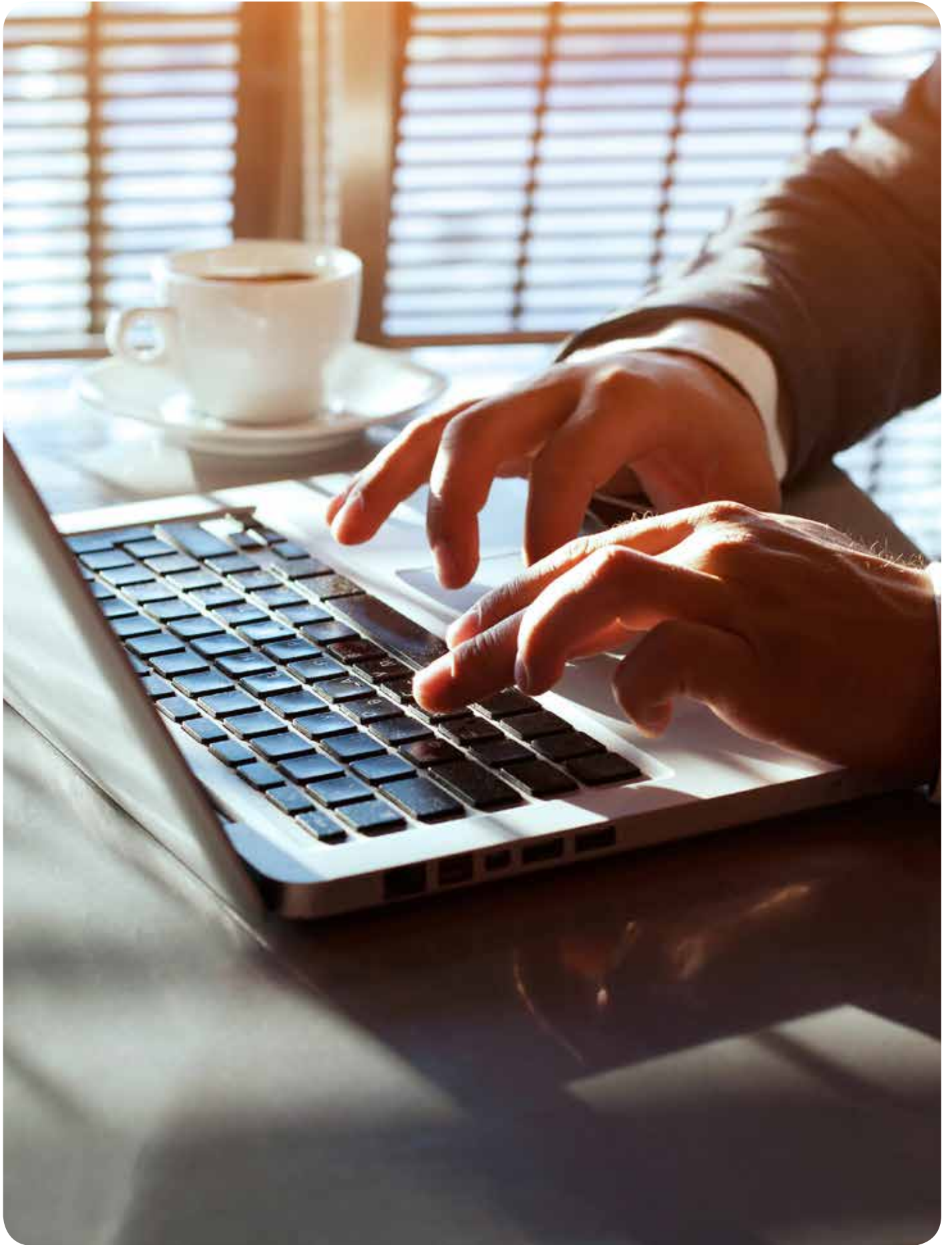


Hybrid

- Combines the capabilities of mobile web and native applications
- Built using HTML and JavaScript (like mobile web) and access native resources (like native apps)
- Managing the complexity of application is challenging. The UI is similar to mobile apps. Lifecycle management is a challenge as some components are device-specific while others are on mobile browsers
- Enterprises that want a mobile browser-based UI with some control on device resources can opt for this

The best-fit for your requirements

	 Fiori / SAPUI5	 Screen Persona	 Floorplan Manager	 Mobile Platform	 Lumira
Implementation effort and time (approximately with dependency on scope and complexity)	High	Low	Medium	High	Very Low
Device and platform dependency	Yes. Fully compatible	No. Runs partially as HTML GUI	No. Runs partially as HTML GUI	Yes. Mobile-compatible	Yes. SAP Lumira Cloud - integrated with SAP Business Objects Mobile
Development tools	Web IDE or Eclipse development tools	Persona editor: 1. Templates 2. Scripting 3. Flavor group	ABAP development tools	Native/hybrid mobile app tools	SAP Lumira – desktop or cloud version
Skill-sets required	SAPUI5, HTML5, Javascript, Odata development	N/A. Has a user-friendly drag-and-drop editor	ABAP and Web Dynpro	SMP SDK	N/A. Has a user-friendly drag-and-drop editor
Themes and branding	Supported	Well-supported	Supported	N/A	N/A
Alignment with SAP UX strategy	Yes. Highly recommended	High	Medium	High	High



Summary

Today, SAP has evolved its tools and technologies to offer a better user experience and provides various GUI options. Choosing the right combination of GUI technologies to enhance the UI/UX depends on three aspects – customer priorities, investment and UI expectations. By understanding how each of the five leading SAP UI technologies fulfills these three parameters, enterprises will be better equipped to make the right decision and form a successful UI strategy for their organization.



About the authors



Ravindra Khaladkar is a Principal Consultant with Infosys' SAP Enterprise Solutions Division. He has more than 15 years of experience in technical SAP consulting. As an SAP technology expert, he is currently anchoring SAP automation and innovation at the Infosys CoE with a focus on UI/UX strategy for clients across globe.



Shweta Nargachhe is a Technology Architect with Infosys' SAP Enterprise Solutions Division. She has over 14 years of experience in technical SAP consulting. She is currently anchoring the SAP automation track and focuses on automation and innovation at the Infosys CoE.

For more information, contact askus@infosys.com



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