

# SAP® Screen Personas: Myths Versus Truth About Usability and the User Experience

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Would you like to improve user productivity and enhance the satisfaction level of people working with the SAP® ERP application? You can provide the right information to the right users in a personalized context, so they can do more work in less time with greater accuracy. With easier-to-use, intuitive screens created with SAP Screen Personas software, you can [enhance productivity, minimize user training time, and improve the level of adoption of SAP software in your organization.](#)

SAP Screen Personas is a browser-based add-on that you can use to personalize user interfaces for on-premise SAP solutions. With the volume of [information available about SAP Screen Personas](#), information can become distorted and take on a life of its own to morph into technology

myths. Some myths, based on grains of truth, develop from confused or wishful thinking about product features. See the following table for these myths and related truths about SAP Screen Personas. Each set of myths and truths is explained in more detail in the following pages.

Myth Type	Myth	Truth
<b>Top-level expectations</b>		
	SAP® Screen Personas software will solve all my user experience (UX) needs.	SAP Screen Personas is one of the UX solutions from SAP.
	You can customize everything in SAP Screen Personas.	You can customize most classic screens in SAP ERP.
	SAP Fiori™ apps are replacing SAP Screen Personas software.	SAP Fiori and SAP Screen Personas are complementary.
	SAP Screen Personas runs on all versions of SAP ERP.	SAP Screen Personas runs on versions of SAP ERP as documented in the product availability matrix.

[Read more](#) ►





Myth Type	Myth	Truth
<b>Functionality</b>		
	SAP Screen Personas is a one-click installation.	SAP Screen Personas can be a fast, easy installation process for most users.
	SAP Screen Personas works on all screens in SAP software.	SAP Screen Personas works on most screens in SAP ERP.
	All users can change their transactions by themselves.	IT determines which transactions, fields, or attributes you can change.
	SAP Screen Personas runs on an iPad.	Currently, you can run some limited scenarios on an iPad.
<b>Performance</b>		
	SAP Screen Personas will improve performance of SAP software.	SAP Screen Personas can help increase personal productivity.
	Cache all data to improve performance.	Cache only what you need to optimize performance.
	SAP Screen Personas instantly transforms my screens.	Use SAP Screen Personas as a toolkit to improve classic screens in SAP ERP.

This brochure provides accurate, up-to-date information on how to maximize the value of your investment in SAP Screen Personas.

SAP Screen Personas continues to evolve, so make sure to check the latest information available for information that may affect your purchase decision. You can ask your account executive or post your question on SAP Community Network (SCN).

**Please note:**

- All product information refers to **SAP Screen Personas 2.0**, unless otherwise stated.
- Planned future versions of SAP Screen Personas may include new features and enhancements.



## SOLVING USER EXPERIENCE NEEDS

**Myth:** SAP Screen Personas will solve all my user experience (UX) needs.

**Truth:** SAP Screen Personas is one of the UX solutions from SAP.

If you're looking for a silver bullet to solve your SAP software usability issues, there isn't any. The good news: SAP Screen Personas software can help your organization solve many of its UX challenges. Many people rely on SAP GUI, the universal client for accessing functionality in SAP software, to perform their day-to-day tasks. So SAP GUI plays a significant role in how users perceive SAP software, as shown in Figure 1.

### Improve Usability in Thousands of Transactions

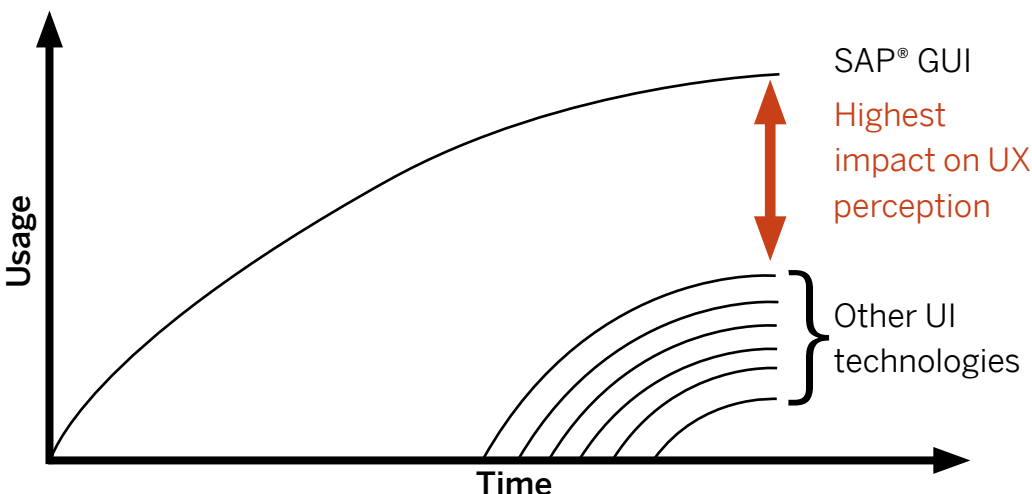
SAP Screen Personas software works on more than 10,000 distinct transactions that customers rely on to run their businesses. These screens appear across both industry and line-of-business solutions.

SAP Screen Personas works only on screens in SAP GUI. The majority of screens in SAP ERP are rendered through SAP GUI. This means that SAP Screen Personas does not work with the SAP Supplier Relationship Management (SAP SRM) application, which relies on the Web Dynpro development environment, a different and newer screen rendering technology. SAP Screen Personas also does not work with the SAP Customer Relationship Management (SAP CRM) application, which relies on Web UI technology for rendering.

Many business users access just a few routine transactions, such as requesting vacation or other leave, entering time sheets, submitting expense reports, or checking pay stubs. For these relatively modest needs, you may not need the full power of SAP Screen Personas. **SAP Fiori™** apps may provide better options.

So, will SAP Screen Personas solve all your user experience needs? Maybe. It depends on your needs.

**Figure 1: Perceptions of Usability of SAP Software**







## CUSTOMIZING SAP SCREEN PERSONAS

**Myth:** You can customize everything in SAP Screen Personas.

**Truth:** You can customize most classic screens in SAP ERP.

Demos of SAP Screen Personas, including how to [simplify a screen](#) and how to [use a simple script to improve user productivity](#), generally present a chosen set of features. You may assume that with more time, you can do more. This is certainly true to a point. The key is to understand the boundaries or parameters.

### How to Use SAP Screen Personas to Improve Usability

SAP Screen Personas is flexible, so you can modify many screen elements. Your goal may be to [simplify multiscreen transactions](#). Or you can retrieve information from different transactions and [display the content on a single screen](#) without ever having to leave the initial screen.

With SAP Screen Personas, you gain many ways to achieve these goals and others to improve usability, such as:

- Remove buttons and controls
- Relabel text on a screen
- Simplify screens to make them more intuitive
- Combine information from multiple tabs onto a single screen

- Add new buttons to launch transactions or perform a series of keystrokes
- Change the color or shape of buttons
- Add images to beautify the background

Based on its architecture and underlying components, these functions are not supported in SAP Screen Personas:

- You cannot drag elements from a table or grid or drop elements into a table or grid. However, you can [use JavaScript to perform actions on any or all of the items in a table or grid](#).
- You cannot add additional columns to a table, which would change the data structure.
- You cannot create new transactions, yet you can integrate custom functions and even [create custom ABAP functions and call them from SAP Screen Personas](#).
- You cannot use [object linking and embedding \(OLE\)](#) to render Microsoft Office applications embedded in screens. Usually, SAP Screen Personas or Web GUI (more details in a following myth and truth) will automatically render a different type of editor (such as a text field instead of Microsoft Word). You can export ALV grids and tables as Excel files.

So, can you customize everything in SAP Screen Personas? Not everything, but quite a lot.



## COMPARING SAP SCREEN PERSONAS WITH SAP FIORI

**Myth:** SAP Fiori™ apps are replacing SAP Screen Personas software.

**Truth:** SAP Fiori and SAP Screen Personas are complementary.

Like SAP Fiori, SAP Screen Personas has been generating excitement among SAP customers and partners. Increasing numbers of customers are using SAP Screen Personas to drive productivity through personalization. SAP partners are now building UX practices based on the software.

Do you want guidance on [how to choose](#) between SAP Fiori and SAP Screen Personas?

### Short Answer: You Do Not Have to Choose

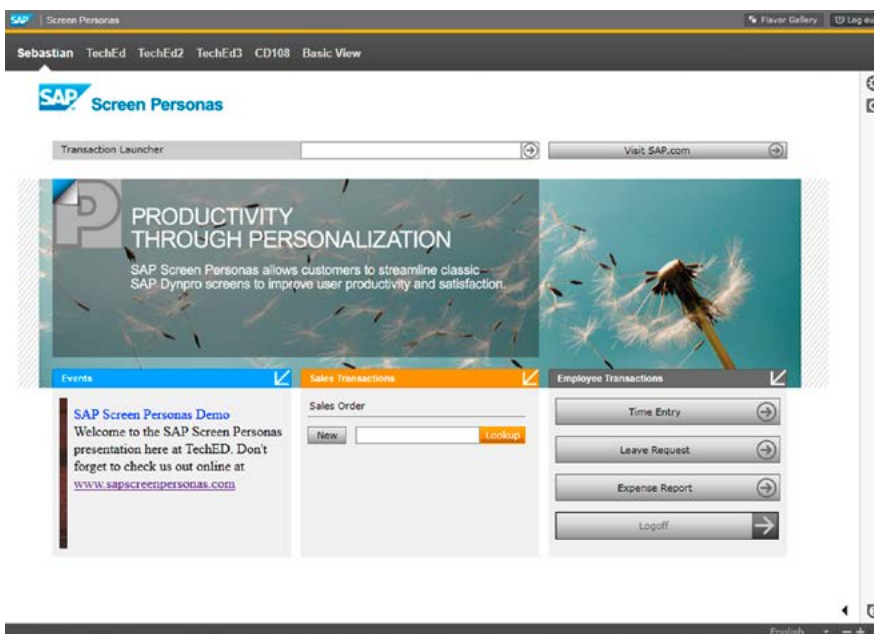
Some customers are using both SAP Screen Personas and SAP Fiori to help make SAP software more intuitive. Each has its own distinct use cases:

- **SAP Fiori** provides a unified look and feel across mobile, tablet, and desktop devices for access to common SAP functionality.
- **SAP Screen Personas** modifies classic screens in SAP ERP by combining tabs and screens, automating keystrokes, and prefilling fields to improve your users' productivity.

SAP plans to make continued improvements in performance, scalability, and ease of use in future versions of SAP Fiori and SAP Screen Personas.

So, SAP Screen Personas and SAP Fiori are complementary and part of SAP's commitment to enhance the user experience for customers.

Figure 2: SAP Screen Personas – Productivity Through Personalizing Screens





## IDENTIFYING SOFTWARE THAT SAP SCREEN PERSONAS RUNS ON

**Myth:** SAP Screen Personas runs on all versions of SAP ERP.

**Truth:** SAP Screen Personas runs on versions of SAP ERP as documented in the product availability matrix.

SAP Screen Personas, as seen in Figure 2, works for many types of customers. It runs in most modern SAP software environments. You can check the product availability matrix to see if it runs on the version you are using. SAP Screen Personas is not supported on systems not using Unicode. The recommendation is to keep your SAP ERP application up-to-date to help ensure optimal operation in your software landscape.

## INSTALLING SAP SCREEN PERSONAS

**Myth:** SAP Screen Personas is a one-click installation.

**Truth:** SAP Screen Personas can be a fast, easy installation process for most users.

As with other myths, this one began with a grain of truth that somehow stretched beyond reality. SAP Screen Personas can help you make SAP

ERP easier to use. The SAP Screen Personas story and its purpose is about ease of use and some customers have verified that installation is simple.

### Follow the Documentation for Simpler Installation

SAP Screen Personas is generally easy enough for most IT professionals to use, so they may think they do not need to read the documentation. For building screens, this assumption may be true. However, for installing SAP Screen Personas, please read the documentation to help ensure a successful implementation.

Every SAP software environment is unique. Since SAP Screen Personas installs onto the SAP NetWeaver® Application Server component for the ABAP® programming language, you should have a qualified IT person perform the installation. For a highly skilled SAP expert, the installation and configuration process is straightforward. The documentation explains what to do and why each step is important.

Check out one example of a straightforward, quick [customer installation and configuration of SAP Screen Personas](#) – after he read the installation documentation.





## Use the Latest Versions and Notes

If you want SAP Screen Personas to run at its best, make sure that you deploy the correct version of all components, as detailed in the following table.

Component	Version
SAP® ERP Central Component (SAP ECC)	6.0
SAP NetWeaver® technology platform	700 – Support package 24 or 701 – Support package 09 or 702 – Support package 07

### SAP Screen Personas notes

Internet Transaction Server (ITS)	7.21, Patch level 201
SAP Screen Personas software add-on	SAP Screen Personas 2.0, service pack 2

### Configuration notes

SAP Screen Personas software client	Automatic updates from SAP Screen Personas add-on when a user connects; requires Silverlight 5 plug-in for the browser
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Be sure to check relevant notes to identify any known issues. Check the current list of all [recommended notes](#) for [SAP Screen Personas on SCN](#).

So, if you have experience with deploying SAP software, or take time to read the documentation and follow the steps, you can likely install and configure SAP Screen Personas quickly and easily. But it's not a one-click installation.







## WORKING ON SCREENS IN SAP ERP

**Myth:** SAP Screen Personas works on all screens in SAP software.

**Truth:** SAP Screen Personas works on most screens in SAP ERP.

During early demos of SAP Screen Personas, viewers saw how it can help improve worker productivity when using screens in SAP ERP. They then told colleagues about this amazing add-on that significantly improved the user experience for SAP software. As word spread, the fact that SAP Screen Personas works only on screens in SAP GUI got lost.

The ability to modify only screens in SAP GUI is hardly a limitation, since you can personalize more than 10,000 transactions and more than 200,000 individual screens. As discussed in the first myth that [SAP Screen Personas will solve all UX needs](#), screens in SAP GUI comprise the majority of screens in SAP software and, therefore, influence how people perceive usability.

### **Dynpro (SAP GUI) and Web Dynpro: Two Distinct Technologies**

Dynpro, short for dynamic programming, is the rendering technology used for screens in SAP GUI. SAP GUI, the client software used to connect to SAP solutions, runs on a server. SAP introduced SAP GUI in the 1990s, and millions of people around the world rely on it. You can also access functionality in SAP software (more than 10,000 transactions) through a browser using SAP GUI for HTML, also called “WebGUI.”

WebGUI is not the same as Web Dynpro. Web Dynpro, introduced in the mid-2000s, runs a different set of SAP applications in the browser. Unlike SAP GUI, Web Dynpro does not require any client software, because it runs in the browser.

Confusion may result from the fact that both WebGUI (SAP GUI for HTML) and Web Dynpro run SAP software in a browser. They can even look similar in some cases since they are both using the same internal rendering library – unified rendering. However, since the underlying applications are written completely differently, the screen modifications that SAP Screen Personas makes to screens rendered through WebGUI will not work with Web Dynpro.

Another possible cause of confusion is that SAP GUI (Dynpro) and Web Dynpro technologies coexist seamlessly. If you are running either the SAP NetWeaver Portal component or SAP NetWeaver Business Client software, these two technologies appear in different tabs on the same screen, access the same underlying data, and look almost identical.

Technically, SAP GUI (Dynpro) relies on server-side rendering, a technology that fits in a landscape that targets slim clients or terminals, or is optimized for extremely high performance. A full model of the screen exists on the client side as well as the server side, and only events and exact layout information are exchanged between them. In a Web Dynpro application, the created HTML stream relies on the browser to correctly render and lay out controls on the screen. This reliance causes the final result to depend more on screen characteristics on each user computer.





SAP Screen Personas focuses on classic SAP ERP screens (Dynpro) since a solution for changing [Web Dynpro](#) screens already exists: “[Floorplan Manager](#).” SAP CRM also includes some [personalization features](#) that enable users to suit screens to individual needs, so SAP CRM is not addressed in SAP Screen Personas.

In summary, SAP Screen Personas works on most but not all screens. Where it does work, SAP Screen Personas significantly improves usability of screens in SAP ERP and it does not create any disruption to existing transactions or workflows.

### CHANGING TRANSACTIONS

**Myth:** All users can change their transactions by themselves.

**Truth:** IT determines which transactions, fields, or attributes you can change.

Again, this myth is based on a foundation of truth. The development of SAP Screen Personas began with the premise that anyone should be able to modify their screens in SAP software to meet their unique needs. In our customer validation phase, prior to the release of SAP Screen Personas version 1.0, IT professionals described a potential support problem in a typical enterprise environment with thousands of users.

Proper controls have been built into SAP Screen Personas so your IT organization can control who can modify which screens. This capability can vary from the ability to change anything (rare) to the ability to use screens as delivered by IT without being able to modify anything (more common). For users allowed to modify screens (typically one or two key users per department),

IT has extensive and granular controls to determine which permissions a user has for modifying screens.

### RUNNING ON TABLETS AND MOBILE DEVICES

**Myth:** SAP Screen Personas runs on an iPad.

**Truth:** Currently, you can run some limited scenarios on an iPad.

Development of SAP Screen Personas began with the creation of simple overlay technology that you can use to simplify screens in SAP GUI without disrupting the underlying SAP software environments. Several prototypes using different technologies (including both Silverlight and HTML5) have focused on delivering pixel-perfect rendering across Windows and Macintosh desktops using the leading browsers.

SAP Screen Personas 2.0, including [all subsequent service packs](#), relies on the free [Microsoft Silverlight browser plug-in](#) to render more intuitive versions of classic screens in SAP ERP that customers design using a simple editor. Since most mobile devices (except tablets using Microsoft Windows 8) do not have a Silverlight plug-in available, SAP Screen Personas does not currently run on those devices. Microsoft is supporting Silverlight 5 through October 2021.

[SAP Screen Personas 2.0](#) also includes an HTML component that does not require Silverlight for rendering the screens. Because of the interdependencies between [SAP Screen Personas and underlying SAP ERP software](#), this component runs everywhere that Web GUI (also known as SAP GUI for HTML) can run. Currently, iPad, other tablets, or Android devices are not included.





Think about the different ways you access key functions in SAP GUI. To trigger some actions, you use fairly deep menu structures, right-click on menus, and click the F4 key to open a pop-up window. Date entry happens in a pop-up calendar, and numeric input usually requires use of a keyboard.

On an iPad, you would probably expect to scroll through a table by swiping your finger and to see scroll wheels for date and time entry. Since these features are not supported for WebGUI on an iPad, SAP Screen Personas will not run fully and provide the experience you may be expecting.

For classic SAP GUI (Dynpro) technology, SAP software relies on a server-side rendering approach. The back-end software always tries to provide a screen that uses the available screen size. If you change the size of your browser used to render SAP Screen Personas, or simply resize the window in SAP GUI, the system fully refreshes the screen. The simple act of rotating an iPad also causes full re-rendering of the screen because the screen size is changing.

Can you render Web GUI on an iPad? Sure. Will the HTML component in SAP Screen Personas run in that environment? Yes, to the extent that Web GUI runs. Can you define a distinct scenario in which the HTML component in SAP Screen Personas works well on an iPad? Probably. Will it be good enough to run your entire business this way? Probably not.

## IMPROVING PRODUCTIVITY OF SAP SOFTWARE

**Myth:** SAP Screen Personas will improve performance of SAP software.

**Truth:** SAP Screen Personas can help increase personal productivity.

Conversations about improving SAP software can take on different dimensions: usability, aesthetics, or performance. The myth about SAP Screen Personas improving performance of SAP software is probably a misinterpretation of how SAP Screen Personas transforms the user experience.

SAP Screen Personas enables you to personalize screens in SAP ERP for different user roles. The focus of the software is to make screens more intuitive, thereby improving user productivity. Since you can generally perform job functions faster and easier using SAP Screen Personas, this may be perceived as improving overall system performance.

For overall performance of SAP software, consider an environment that includes both user time and computer time. To measure them, observe someone completing a transaction or series of transactions for a typical business process on an unmodified SAP screen. Then measure the person running the business process again using SAP Screen Personas.

Which will be faster? It depends on these factors:

- How well does the user know the transaction codes and keyboard shortcuts required to complete the transaction?
- How much time does the user need to spend entering the same data for multiple transactions that comprise the end-to-end business process?





- How much time does the user need to learn all the transactions?
- How much time may be needed to correct mistakes that the original user introduced by entering bad data or leaving out critical information?

See how SAP Screen Personas can help improve transaction productivity in the following figure.

### The Underlying Architecture Determines Performance

Both SAP Screen Personas and SAP GUI for HTML (WebGUI) are user interfaces built on the Internet Transaction Server (ITS). Architecturally, ITS translates screens in SAP GUI into an HTML

stream, which in turn is sent to the browser running on the client system. The time this process takes depends on the amount of information required to render the screen.

If you are looking for the best possible performance using SAP Screen Personas, start by ensuring that large tables and value sets are reduced to the necessary minimum – to help ensure fast processing by the ITS.

Generally, the amount of data transmitted and the ITS processing time ([see the ITS sizing guide](#)) are comparable between SAP GUI for HTML and SAP Screen Personas.

Figure 3: Create Notification Transaction With and Without SAP Screen Personas

#### With SAP® Screen Personas



#### Without SAP Screen Personas



- Hierarchical tree that is rarely used
- Too many buttons
- Notification type needs to be selected from list via F4 help
- No templates for free text are provided
- Unused, empty space
- Complex hierarchical structure
- Too many buttons
- Too many tabs, some not needed at all
- Some fields are not needed







### Scripting Speeds Performance

If your IT organization executes a script that automates a number of server actions using scripting in SAP Screen Personas, you may see a surprising jump in performance. This improvement is triggered by executing numerous steps entirely within the ITS without requiring additional round trips. Since the intermediate screens don't need to be sent to the client, their processing is minimal and performance improves.

What are some ways that SAP Screen Personas can help SAP software run faster than an unmodified screen?

SAP Screen Personas reduces round trips to the server running SAP ERP to retrieve data:

- Automating a series of keystrokes to skip screens and eliminate round trips to the server
- Caching information in tables to avoid multiple calls to the server
- Merging tabs so all key information appears on a single screen rather than distributed in tabs that require multiple clicks, scrolling, and calls to the server

SAP Screen Personas can help you work faster:

- Launching transactions with clearly labeled buttons rather than typing transaction codes that the user must memorize or look up
- Prefilling fields to avoid typing the same information more than once
- Using pull-down menus to speed entry of a limited set of data and eliminate typing errors

So, does SAP Screen Personas improve SAP software performance? Yes, it can, but perhaps in different ways than you may have thought.

### CACHING DATA TO IMPROVE PERFORMANCE

**Myth:** Cache all data to improve performance.

**Truth:** Cache only what you need to optimize performance.

In the mainstream world of IT, caching is used extensively to improve performance. Generally, caching stores information close to where it will be used. Databases have long used caching to speed performance by keeping frequently used data close to where the processing occurs. Intel uses caching on its chips to keep key data closer to the CPU for faster processing. SAP Screen Personas uses a similar approach for processing information in tables, tabs, and grids.

To design screens using SAP Screen Personas, you can choose to cache certain information on the client system to avoid a round trip to the server. This process follows the general caching principle of putting information close to where it will be used.

So why would you not want to cache many screens of data to have as much information ready for instant access as possible? Consider these reasons why you would not want to do it:

- In SAP transactional software, storing data that changes frequently can result in seeing stale – not the most current – information if your cached data no longer matches the current information.
- SAP Screen Personas retrieves screen definitions and data from the server before rendering the screen. The more information you retrieve from the back end, the longer it takes for SAP Screen Personas to render the screen.



For example, if you cache all tabs in a complex transaction in SAP ERP, such as creating a sales order, your screen will take a long time until it is ready to use. Tables with more than 100 columns will also take a long time to cache.

- Hide whatever you can on the server before you send it to SAP Screen Personas. For example, create a table variant in SAP GUI before you design your screen in SAP Screen Personas so you are moving less information to the client.

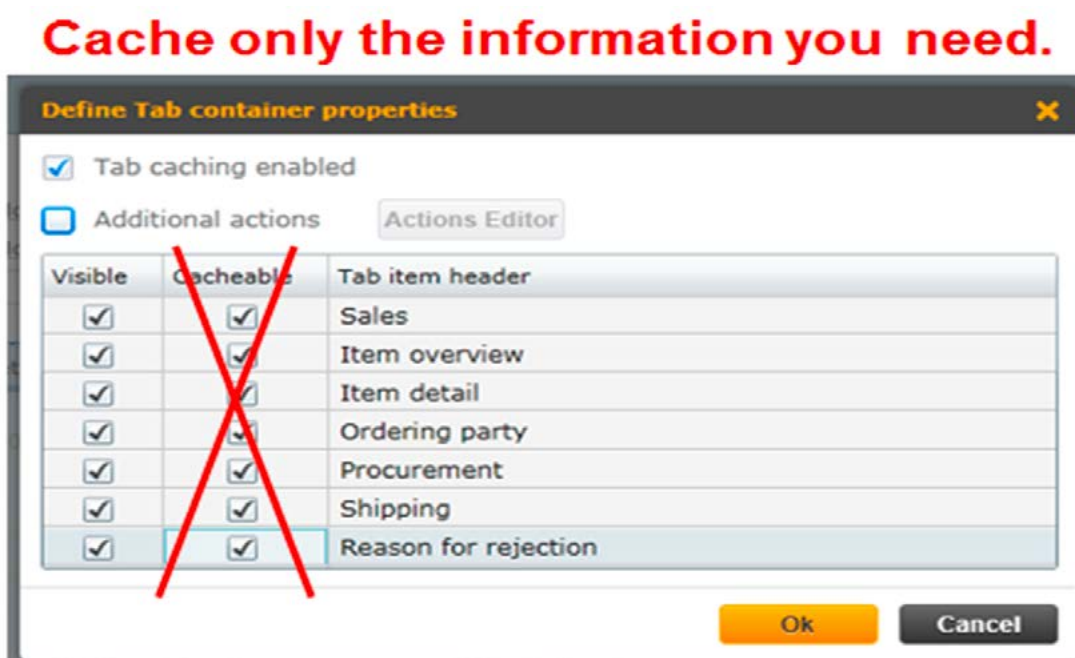
So, how can you use caching in SAP Screen Personas productively?

- Be very selective in which tabs you cache. Select only the tabs where you need fields to build your screen. Recommendation: cache no more than five tabs.
- Understand what information is in your tabs. A few fields will render very fast. A wide table will take longer.

Caching is one of the ways that SAP Screen Personas can help improve productivity through personalization. With caching, you can merge information from multiple tabs onto a single screen, which simplifies the screen and reduces the number of key strokes to complete a transaction. You can search on tables or use conditional formatting to highlight rows that meet specific criteria.

Remember, **cache information selectively rather than caching everything**, as shown in Figure 4.

Figure 4: Improving Performance with Selective Caching



## USING SAP SCREEN PERSONAS AS A TOOLKIT

**Myth:** SAP Screen Personas instantly transforms my screens.

**Truth:** Use SAP Screen Personas as a toolkit to improve classic screens in SAP ERP.

Once again, this myth may have originated during a demo of SAP Screen Personas in which we showed simple use cases or functionality such as scripting, merging tabs, and simplifying screens. Some demo viewer may then have imagined how the simplified screen transformation process could work in their environment.

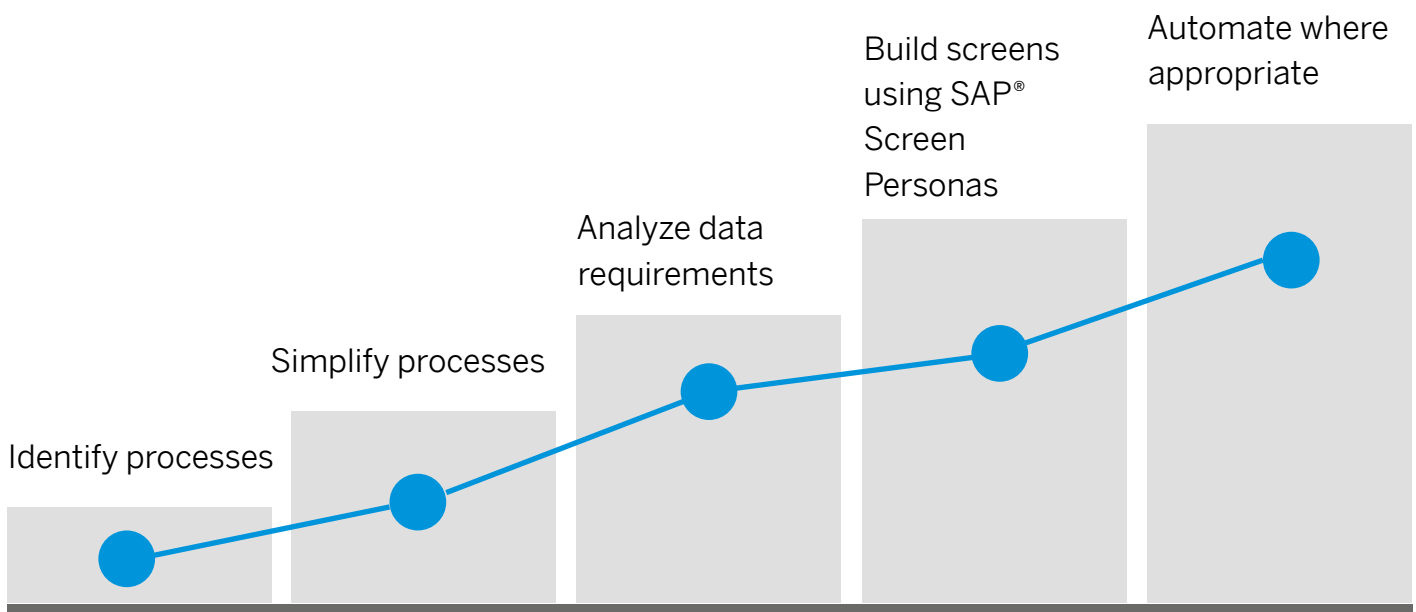
Use SAP Screen Personas as a toolkit to simplify screens to help drive productivity through personalization. While SAP Screen Personas can make classic screens in SAP ERP more intuitive, the process should involve IT and business organizations working closely together.

Before you start simplifying screens, SAP recommends that you examine the documentation and the steps required for a successful implementation of SAP Screen Personas.

The first phase involves gaining a thorough understanding of your business processes: who needs what data, when do they need it, and with what additional context. Then analyze your processes and determine what you can simplify. You can do this in-house, bring in SAP professional services, or hire a qualified SAP partner.

As the following figure shows, more than half the time you spend on implementation should be on understanding and streamlining your business processes. Then you can start using SAP Screen Personas to simplify screens, merge tabs, and automate repetitive actions.

**Figure 5: Streamlining Processes Before Using SAP Screen Personas**





For simple, mostly cosmetic changes, using SAP Screen Personas can take only a short time. For more complex scenarios that combine information from multiple transactions onto a single screen, it may take longer to build screens. While you generally must build one screen at a time with SAP Screen Personas, you can use global settings to change all screens with one set of commands.

During most presentations on SAP Screen Personas, our customers tell us it is one of the easiest solutions they use for modifying the look of screens in SAP GUI. When mentioning other approaches they tried (including products from competitors), some customers describe how they did more development than expected and still did not achieve the results they wanted (or promised by the vendor).

So, does SAP Screen Personas instantly transform your screens? Not instantly, but you can speed the process by choosing a pilot project with a relatively narrow scope.

## **BECOMING MORE PRODUCTIVE THROUGH PERSONALIZATION**

SAP Screen Personas can help you drive productivity through personalization. Customers are reporting extensive time savings for completing streamlined transactions. After you understand more about capabilities you can gain using the software, you can build high-performing screens to simplify the user experience and become more productive by making screens in SAP software more intuitive.

For more information, visit [www.sapscreenpersonas.com](http://www.sapscreenpersonas.com) or speak with your SAP account executive.





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