Visualize SAP®
Accelerating Time to Value for SAP Projects
Using Software Visualization

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Executive Summary

Complex SAP® implementations can be tricky business for any IT organization. Whether the goal is initial implementation, rationalization of multiple instances or upgrades, successfully configuring, extending and integrating SAP into your end-to-end workflow involves many complex steps, along with precise people, process and technology coordination. Getting the business requirements right is imperative. But oftentimes companies get tripped up during this critical first step.

The reason is simple. The way that business requirements are elicited, documented and shared for SAP projects hasn’t changed in over 20 years! During Blueprint, subject matter experts configure sandboxes and document requirements gaps using text, spreadsheets and flow diagrams, artifacts that are nearly impossible for business people to understand and interpret. The resulting confusion can delay projects for months. Change management is delayed until working code appears. And downstream developers and global sourcing partners get incomplete information, compounding the delays and cost overruns.

The bottom line is that business people really don’t know what they want until they see and interact with it. Months can be wasted trying to gain consensus on what to build using traditional requirements methods on SAP projects.

Now there is a better way.

Many companies have turned to iRise™ enterprise visualization as a strategy to dramatically accelerate time to value for SAP projects. Visualization empowers the business to fully experience and interact with proposed SAP implementations early in the process; without any coding. iRise visualizations can be assembled at light speed, and look and behave just like the final product, accelerating understanding and eliminating confusion. Stakeholders 'test drive' their SAP implementations before expensive sandbox environments need to be created. Change management begins on day one of Blueprint. User acceptance testing and time to realization are accelerated by months. And downstream development partners get an exact guide for what to build, eliminating confusion, change orders, delays and cost overruns.

This paper makes a compelling business case for why visualization is quickly becoming a standard practice for organizations that want to accelerate time to value for their SAP implementations.

“Visualization allows us to accelerate the delivery of business software with low risk. Companies of all sizes rely on SAP to run their businesses. Today, customers are even more focused on implementation duration, time-to-value and the overall simplification of SAP’s roadmap. By adopting visualization from iRise, we can provide this simplification and assist our clients in clearly capturing their vision. In turn, we help mitigate risk and implement in the shortest time possible.”

- Ross Wainwright EVP for North America Field Services SAP America, Inc.
The Problem

It’s no secret that SAP projects can be long, complicated and risky. But successful implementations can pay huge dividends for companies that want to drive efficiencies and standardized business practices.

Once a decision has been made to implement SAP, oftentimes the first step in the process is to find out what needs to be changed from ‘vanilla’ SAP to meet the needs of the business. A sandbox is configured so that users can experience the out-of-the-box functionality. Requirements for proposed extensions are documented in large functional specification documents, along with process flow diagrams and, in some cases, static screen shot mockups that attempt to demonstrate the look of the final system. These extensions are simply written down on paper in the functional specification and then coded later during the realization phase of the project, an extremely risky proposition since no one can see or experience the proposed extensions until development.

The functional specification artifacts are reviewed in a series of painful stakeholder meetings as everyone struggles to understand what is being proposed. Confusion reigns as everyone imagines a different mental picture of the end result. Frustration mounts as the weeks go by without consensus and eventually the functional specification document gets signed off without true understanding.

Now the project is in real peril. Downstream developers spend months coding and testing to the same confusing requirements and eventually show the system to the business people, whose inevitable reaction is; “That’s not what we wanted!” Introduce systems integrators and global sourcing models into the picture and you can quickly see how SAP projects can get derailed. And in this traditional model, change management can’t start until the realization phase of the project, contributing to confusion and delays.

The bottom line is that business people need to see and interact with an SAP system before they can truly articulate their needs. So how can organizations take the risk out of SAP implementations?

The answer is simple: Visualize before you build.
Introducing: Enterprise Visualization for SAP

iRise is the world’s only enterprise visualization solution for SAP. iRise gives organizations a unique way to quickly experience SAP configurations, extensions and integrated workflow for a broad range of SAP solutions (SRM, CRM, SCM, PLM, ERP, MII, APO, integrations to third party solutions, etc.) - without coding. The concept is simple; business analysts, SAP functional analysts and subject matter experts assemble a working preview of an SAP solution in a matter of hours, as a first step of Blueprint. The visualization exactly mimics the final system including look, feel, data interactions and business logic (see Figure 1), giving stakeholders the ability to ‘test drive’ and fully experience SAP before any expensive coding.

Figure 1: iRise visualizations look & behave just like the final working SAP solution

iRise can help organizations visualize at light speed on a broad range of SAP projects that generally fall into one of three categories:

- Visualizing ‘Out of the Box’ functionality – SAP screens can be easily captured and imported into iRise to visualize a baseline implementation of SAP functionality.
- Visualizing Extensions – iRise can be used during Blueprint to visualize proposed changes to baseline SAP screens.
- Visualizing Integrated Workflow – iRise is a powerful way to understand how SAP implementations will fit into a complex ecosystem of IT applications and systems like Web-based, packaged and mobile delivery devices.

Enterprise visualization from iRise dramatically accelerates time to value for mission-critical SAP projects by improving communication with both business and IT stakeholders:

- Accelerate Blueprint by 50%
- Accelerate realization by 50% through a dramatic reduction in rework
- Accelerate change management, which now begins day one of Blueprint
- Eliminate confusion and communication issues with sourcing partners
- Visualize any other business software in the portfolio, creating an end-to-end model
How Visualization for SAP Works

Assembling a working visualization for an SAP solution is fast, straightforward and does not require any coding. The SAP business analyst uses the iRise platform (shown in Figure 2) to create, publish, review and quickly iterate on SAP visualizations.

The following sections describe the process of creating an iRise visualization of SAP solutions that highlights key capabilities of the iRise platform.

**Workflows (Scenarios)**

The iRise scenario builder within iRise Studio empowers business analysts to quickly create integrated SAP solution workflow. Icons representing SAP screens can be dragged and dropped onto the white board, along with descriptions and decision points. Backend processes not easily visualized can be represented easily with cloud icons.
Fully Functional SAP Screens

SAP screens can be quickly assembled either by using pre-built templates or capturing screen shots. Standard SAP solution behaviors can be easily simulated by adjusting properties for controls with a point-and-click interface. The resulting screens look, act and behave just like the final SAP solution.

Requirements

Text requirements can be documented alongside the working SAP screens, making it easy to associate specific business needs with their corresponding elements in the application.

Data Interactions

Connecting data to SAP screens is easy with a simple drag and drop interface. Datasheets mimic the behavior of popular spreadsheet applications and enable the analyst to introduce rich data types (text, images, video, etc.) into the SAP solution screens.
Content Templates
Pre-assembled masters, templates and styles, along with scenarios and pages for specific SAP solutions are available that speed time to visualization for a broad range of SAP projects and help enforce best practices for customer experience and branding.

Stakeholder Review/Validation
Publishing SAP visualizations is easy. SAP business analysts simply send a URL to stakeholders, directly connecting them to the iRise Definition Center, the hub for collaboration. Reviewers interact with and fully experience the SAP visualization from within standard Web browsers and are able to leave comments directly on the screens they are reviewing. Comments are collected and managed by the server for easy access by analysts.

SAP visualizations may also be encapsulated in a standalone file called an iDoc and emailed to stakeholders for review; their experience with the visualization is exactly the same as if they were connected to the Definition Center. Once the annotated iDoc is sent back to the authors, the Definition Center collects all the comments together for easy presentation and management. iDocs are also powerful definition documents for systems integrators that act as an exact guide for what to build, eliminating confusion about requirements.
Enterprise Collaboration

The iRise Definition Center empowers your SAP team to collaborate in real time, not only during the requirements phase of the project, but during development as well. Capabilities provided with the iRise Definition Center include:

- Real-time, team-based collaboration for rapid authoring & reviewing iterations.
- Self-guided stakeholder guides allow business stakeholders to review and comment on visualizations stored in a central server.
- Reusable definition assets can be stored on the server, speeding time to visualization and enforcing customer experience best practices.
- Powerful comments management functions collect and organize stakeholder reviews into easily manageable groups for visualization authors - a necessity for globally disperse stakeholder audiences.
- iConnect™ API jump starts downstream development by enabling visualization projects to be exported into XML format. This XML output can easily be converted - programmatically or using tools - into richly-formatted specification documents and spreadsheets, integrated into downstream development or quality tools, or even transformed into development assets such as HTML or code.
- SAP visualizations can be exported into self-contained files called iDocs that can be shared over email, enabling unparalleled distributed stakeholder feedback, which is captured and collected in a convenient form on the server for definition teams.
- Reusable SAP content modules are available from iRise that speed up time to visualization and are stored and shared on the Definition Center (see below).
- Facilitated multi-user usability tests are possible with a centralized server that captures multiple stakeholder feedback at the same time.
- Check-in/Check-out for disconnected authoring lets modeling and prototyping activity to continue without network connections.
- Secure access to critical intellectual property through LDAP enabled user authentication is supported.
- Integrations with IBM Rational Requisite Pro and HP Quality Center requirements management tools.
- Centralized administration of users, groups, projects through an intuitive administrative user interface.
Sandoxes & Visualization

Visualization can be leveraged whether an organization has a sandbox environment already configured or not. A sandbox is a ‘test’ implementation of SAP that requires needs to be configured by subject matter experts and usually takes weeks to build.

- **“Visual Sandbox”** – iRise is a cost effective way to quickly create a visualization that acts as a visual sandbox so that extensions and integrations can be ‘test driven’ without expensive configuration. Assembling a visual sandbox with iRise takes days, not weeks. This speeds up the definition process dramatically with much lower cost. Using this approach, change management can be accelerated to the first day of blueprint.

- **Existing sandbox** – If an organization has already invested in building an SAP sandbox, iRise can be leveraged during Blueprint to quickly visualize gaps between ‘out of the box’ SAP and complex configurations, proposed customizations, extensions and integrations. This strategy dramatically accelerates blueprint, speeding up the process and cutting cost for the overall project.

The other issue with traditional sandboxes is that only a few stakeholders can get their hands on them. In general, business users don’t get access to the sandbox; it’s typically just developers and architects that have this privilege. Using iRise visualizations as a visual sandbox, links to visualizations and iDocs can be distributed to a much wider set of business users, expanding feedback options and speeding up the process.

iRise for SAP Content Solutions

iRise for SAP® Solutions

The iRise for SAP Solutions content module contains over one hundred pre-defined masters, templates and other assets that can be used to speed time to visualization for a broad range of SAP projects. This content includes assets based on SAP's WebDynpro user interface technology and SAP's BSP user interface technology.

iRise for SAP® Solutions – SRM Edition

iRise for SAP Solutions - SRM Edition is a content module that includes detailed visualizations of key business processes supported by the SAP Supplier Relationship Management (SRM) solution; software for fully integrated source-to-payment. This content includes:

- Fully modeled scenarios, including: employee self service shopping cart, professional shopping cart, approval process, sourcing cockpit, strategic sourcing, supplier self service
- Pages: the SRM Edition includes each of the pages that participate in the scenarios above - with all text labels replaced with iRise text widgets, all buttons replaced with iRise buttons and all enterable fields replaced with iRise text inputs. In most cases tables are dynamic and tab structures are supported with alternate views.
- Image Only Pages: In addition to the modeled pages above, the SRM Edition includes screen shots of many SRM pages to facilitate quick modeling (by overlay) for sales demos and simplified scenarios.
Summary

Mission-critical SAP projects are simply too important to risk using 20 year old technology to elicit, capture, document and manage requirements. Visualizing before configuring, extending or integrating SAP solutions is quickly becoming a standard practice at many companies, accelerating change management, dramatically improving quality and speeding delivery by reducing rework. A simulated SAP solution (including look, feel, data interactions and business logic) empowers stakeholders with a fully immersive experience for SAP solutions. The right business needs are captured the first time, speeding up projects and eliminating costly mistakes.

In summary, leveraging visualization early on an SAP project has the following benefits:

- Change management begins on day one of Blueprint
- Demonstrate end-to-end workflows without having to configure a sandbox
- Bring clarity to requirements and drive stakeholder acceptance
- Accelerate user acceptance testing and time to realization
- Reduce Blueprinting cost and time by leveraging visualization workshops to define requirements
- Demonstrate the full end-to-end experience, including integrations and extensions
- Reduce rework with a common visual understanding for what to build
- Visualizations act as an exact guide for development partners; eliminating delays and cost overruns when systems integrators are involved.
- Pre-assembled content is available to speed time to visualization and enforce best practices.
- Visualizations accelerate training, documentation and roll-out planning for SAP implementations
- Visualizing early and quickly iterating with end users uncovers usability issues faster.
- Non-SAP projects get accelerated as well because visualization drives collaboration on the definition of the entire extended business process workflow.