

Innovate Faster: Accelerate SAP®

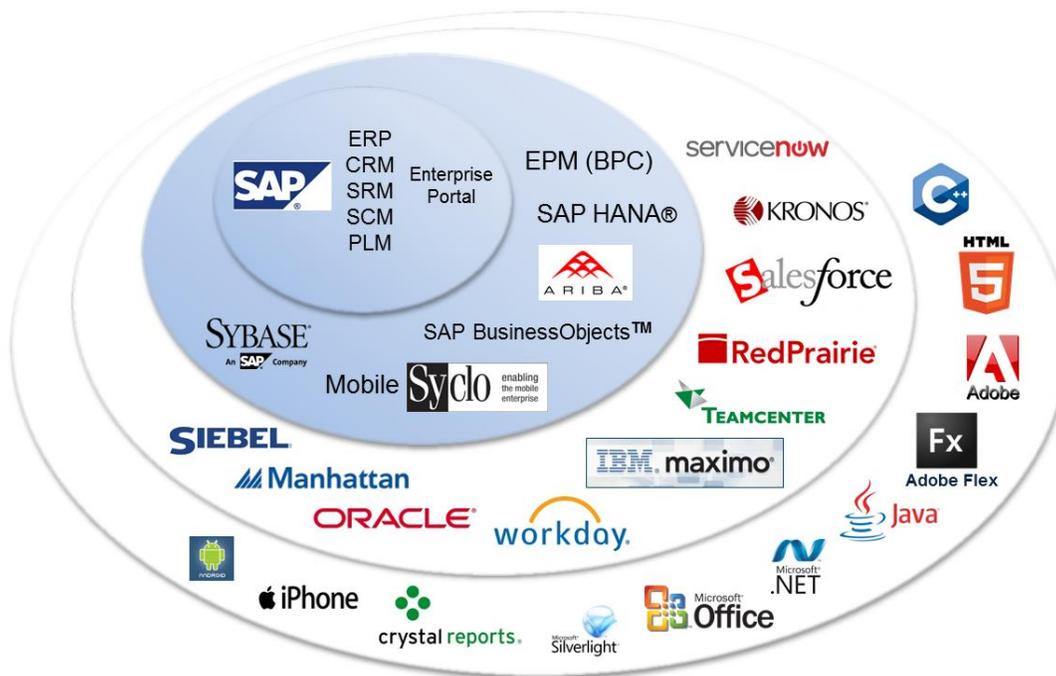
Automation cuts timelines, boosts quality and lowers cost

Innovation is key to a company's future, but reliability is the key to day-to-day operations—and reputation. So how does an organization balance the technology risk that comes with the fast pace of change and the need for stable business processes? Shoeb Javed, CTO of Worksoft, recently discussed how new automation software for business process validation can help companies achieve that balance.



The landscape of mission-critical enterprise applications is more complex than ever. What are you seeing out there?

Some companies have a handful of enterprise applications in use. Some have a hundred or more, including SAP® as a significant component. Companies have to ensure that their business processes work correctly across a much wider variety of systems than ever before. While these technologies create great opportunity for businesses, they also introduce significant risk. If a critical application fails, business processes can come to a grinding halt.



New technologies like SAP HANA® in-memory databases, mobile computing, and migration to the cloud are creating huge business potential today for global enterprises. But deploying them can bring enormous change to already complex enterprise system landscapes. Change can have unintended consequences, and that means risk.

That's interesting. Talk a bit more about some of innovations that are driving technology risk in the near term.

SAP HANA, for example, is designed to tackle big data challenges by enabling companies to match real-time analytics with transactional data. It will enable companies to make more strategic decisions and could fundamentally change the way they do business. HANA represents a transformational change for companies that run SAP. It will allow companies to use real-time data in new ways – so it will change business processes and drive additional upgrade cycles for companies looking to deploy it.

Many other drivers also increase the level of technology risk. This can come from mergers or splits, internal reorganizations, new regulatory or legal mandates, new software modules, or updates of existing apps.

CIOs working in this increasingly complex environment are challenged to reduce the likelihood of unexpected events and project failures. They must be able to ensure that with any change to applications or infrastructure, critical business processes will continue to function. That's a key part of their job. It's not easy to guarantee flawless execution of a company's core business processes – with a highly complex, fast-changing enterprise landscape.

SAP HANA®
In-memory databases

SAP® Consolidations & Splits

Web & Portal Applications

Mobility

Hybrid Cloud

"Today, it's such a different environment out there – risk is not what it used to be. It's geometric levels of complexity. The feeling is 'it takes all the running I can do to fall back just a little.' The rate of change can be hourly."

Industry Analyst IDC, 2013

How are companies managing change in this environment?

It's surprising, but the change management process has remained largely unchanged for a long time. Most companies manage change manually. Even if they have software tools for organizing the change process, the actual activities are largely manual. This is very time-consuming. It's not very efficient and unnecessarily delays projects. It doesn't have to be this way.

What can companies do to accelerate the pace of innovation and deploy new technologies faster?

Innovation means changes to your enterprise systems. That introduces a great deal of technology risk because your business could be disrupted if things don't work as planned. If you could accelerate the process of ensuring that nothing will break when you introduce change, you could go faster. Companies should look at innovating the way that they manage change, just as they're looking at innovation in specific business systems themselves. Automation is an important part of the answer.

You mention that SAP HANA®, mobility and cloud projects offer great dividends, but they also need to be deployed quickly and correctly. How can IT leaders ensure project success—without unintended consequences?

Companies often skimp on quality assurance. They don't have enough time, money or resources, and often projects are already delayed when they get to testing. The result can be catastrophic. If there's a serious glitch, a company might not be able to take orders or ship product. It might get into a situation with so many problems post-production that it's like death by a thousand cuts. If you're deploying new technology with a large number of small problems, you face productivity losses and frustration. The good news is that if you can identify your critical business processes and then automate the validation of those processes, you can avoid all of this risk.

So it sounds like you think something's got to change?

That's right. CIOs in the 21st century are facing a new reality – one where the pace of change is hourly, business is truly global, and running it depends entirely on technology. Yet many companies are still trying to use stone age tools to address these 21st century problems. What I'm talking about are manual, labor intensive approaches. They just don't work anymore.

You may be able to manually validate a business process with 10 variations, but what if you have a business process that works with 10 different mobile devices and operating systems? You now have 100 tests instead of 10 tests. And if the process spans 10 more enterprise

systems, you've just multiplied the challenge 1,000-fold. You have to automate business process validation just to keep up.

With **end-to-end business process validation** CIOs can identify issues before they become problems -- reducing risk and lowering the total cost of ownership of managing the enterprise's business applications. Automated solutions for business process validation enable companies to conduct business with reliability and without disruption, even as they reduce expenses.

Of course, there's always the option to do nothing or stay with a piecemeal manual approach -- and hope that everything works together as it should.

And if it doesn't?

The risks can be catastrophic. If you have a system failure these days, it can mean that you stop taking orders or that your reputation suffers. And in this 24-by-7-365-connected world, that can happen instantly. If you are able to verify with the push of a button that 98% of your business processes work correctly, that is a huge risk mitigating factor. That's what automated business process validation allows you to do.



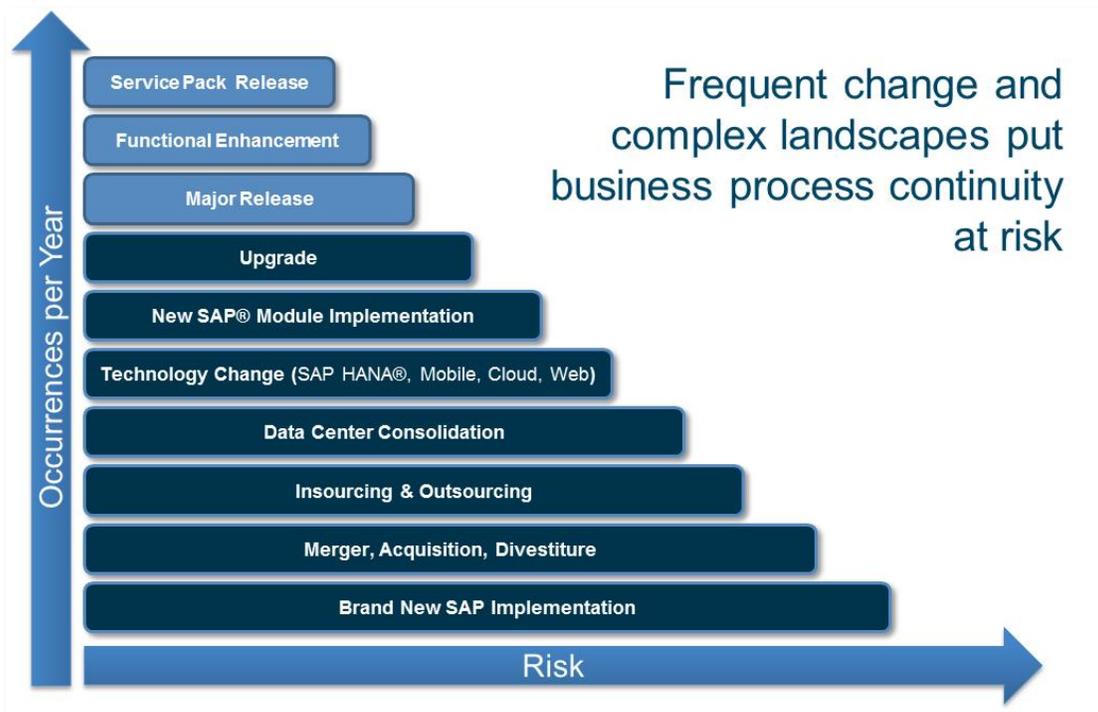
How does business process validation increase business agility and shorten project timelines?

Functionally, you have to make sure that your critical business processes (such as the ones illustrated above. – ed.) work as intended. Then you have to make sure that performance is up to par. If you have 5,000 users doing something at the same time, you need to make sure that your systems are able to handle that.

If you're able to effectively automate the validation of your business processes—including functionality, performance and role-based security—then you can take huge amounts of manual effort and time out of your projects. It also means you can do more projects with the same staff. And that's agility.

That should help reduce the project backlog in IT.

That's right. Large global enterprises deliver hundreds of projects annually, and can have hundreds on their project backlog. In this environment, IT teams need to be both fast and accurate. What's also needed is a repeatable process to deploy technology quickly across all projects in a portfolio. At the same time, a CIO needs daily proof that all of the company's critical business processes still work as intended – even as all of these system changes are deployed. Worksoft's market leading solutions are purpose-built to tackle this need.



What does that mean for the regular maintenance of enterprise systems?

Well, the typical roadmap for SAP and the ecosystem of enterprise applications around it will include system maintenance, minor releases, major releases, upgrades and major projects. Many teams today have determined that if they “stay the course” with current methods, their functional teams would be doing manual testing full time for the next few years! That's not going to work.

More and more organizations are realizing that this is not the most valuable use of their teams' time and resources. Enterprises today simply can't afford to have functional business experts, who are in high demand today, work on anything but high value-added activities.

That's one factor driving the push to greater efficiency and automation. And that's why the most successful organizations with the best quality programs have developed a competency around automated business process validation and test automation. These enterprises have matured their organizations through incremental success and organizational learning.

It seems too good to be true: shorter timelines, higher quality, lower costs, less risk, faster innovation. Has this been proven?

At Worksoft, we've seen some of the largest, most sophisticated global Fortune 500 companies cut project timelines significantly with automated business process validation™. One of our clients is saving more than \$2 million annually in their first year through automation. What used to take 50 people six weeks is now done by two people over a couple of days. And their risk of a business process failure due to technology changes has dropped to nearly zero. By the way, they are just getting started. When 40 cents of every project dollar go to quality assurance, the opportunity is substantial. The real-world savings that companies get from automation are quite dramatic.

That's a substantial budget impact.

Yes, in addition to the huge cost savings, another budget benefit is increased budget certainty. With automated business process validation, projects cost less and run faster – but you have also eliminated much of the project risk that drives unplanned costs. You're catching system glitches and technology problems earlier in the process – before they are deployed to the field. The earlier you catch problems, the cheaper and faster they are to solve.

Automation means fewer project over-runs, fewer variances, and less business disruption due to technology problems. All of that means greater budget certainty for the CIO and the business.

It seems like the companies that embrace automation will be a step ahead of their rivals.

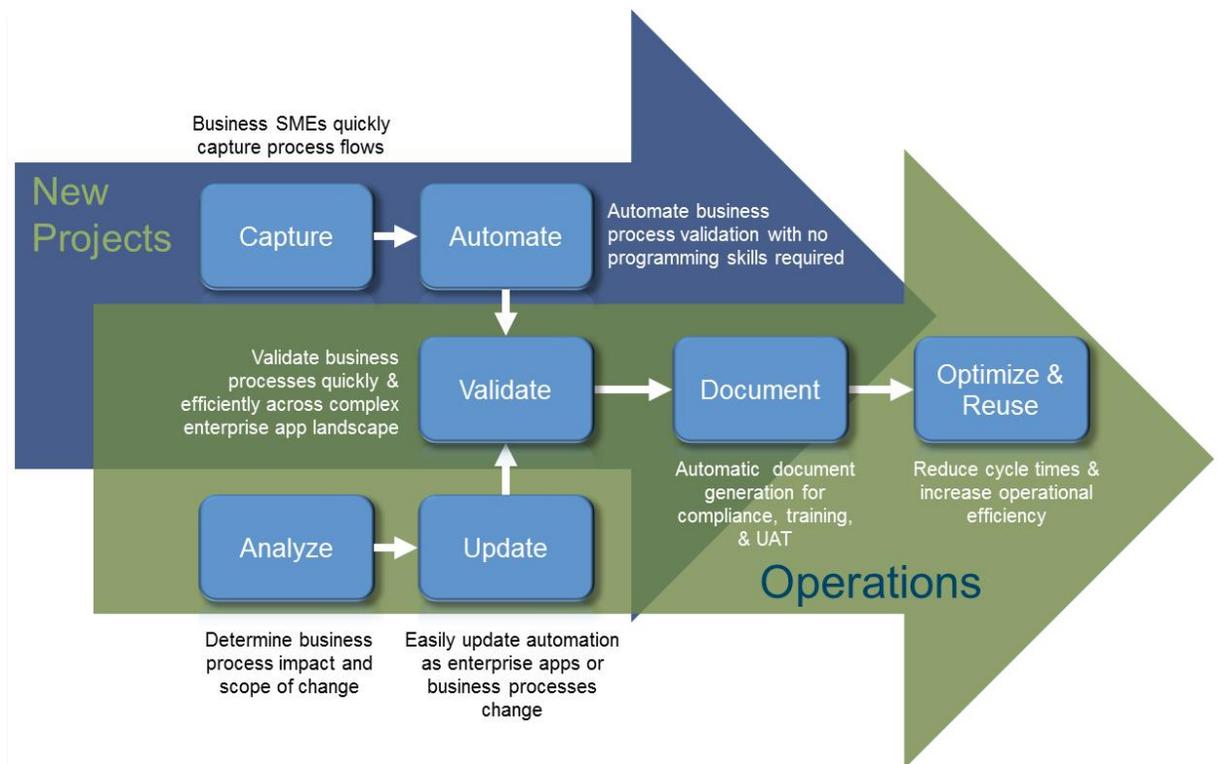
There's no doubt about it. Their teams will be in a position to innovate faster; they will be able to get new, value-creating technologies into the hands of their business users faster; they can do more with the same staff; they will have fewer software glitches for the business; and they will have lower costs.

Like most competitive advantages, there is a window of opportunity now for operating companies to seize the benefits of highly automated testing more quickly than their peers and competitors. That window will likely close in the medium term, as test automation becomes broadly adopted, raising the bar for all industry players as it becomes standard “must have” technology over the next 5 years.

We’re already seeing quick adoption by many Fortune 500 companies.

So how can companies get started with automated business process validation?

Perhaps your company has been doing manual quality assurance for a while, but you know you need a change. Maybe your workload has become intractable, or the budget is under pressure. Or you’ve just completed a project and had a critical business outage. No matter what led you to the crossroad, the experience of others can be beneficial in helping you navigate the path forward. Worksoft has seen many companies move along a proven path in establishing testing as a competency and achieving broad enterprise adoption – along with the dramatic business benefits that result. Worksoft’s experts can work with you to tailor a plan with the right combination of software, training, services, and advice to help you manage your technology changes with the greatest possible confidence and the greatest chance of project success.



Business Process Validation: Defined

Business Process Validation is the act of verifying that a set of end-to-end business processes function as intended. If there are problems in one or more business applications that support a business process, or in the integration or configuration of those systems, then the consequences of disruption to the business can be serious. A company might be unable to take orders or ship product – which can directly impact company revenue, reputation, and customer satisfaction. It can also drive additional expenses, as defects in production are much more expensive to fix than if identified earlier. For this reason, a key aim of Business Process Validation is to identify defects early, before new software is deployed in production so that there is no business impact and the cost of repairing defects is kept to a minimum.

During Business Process Validation (BPV), the business process is checked step-by-step using representative data to confirm that all business rules are working correctly and that all underlying transactions are performing properly across every enterprise application used in the business process. When defects are identified, these problems are logged for repair by IT personnel, business analysts or the software vendor, as appropriate.

Business Process Validation can be performed on various timescales, including the following:

- Project basis, when new enterprise software systems (such as SAP HANA®, mobile, cloud, or web applications) are being deployed for the first time
- Periodic basis, when there are regular monthly, quarterly, or annual updates to enterprise software, such as SAP®
- Continuous basis, when companies want to validate the readiness of their processes and enterprise systems 24/7/365

There are two primary ways to perform Business Process Validation.

Manual Business Process Validation, where one or more people (typically a cross-functional team) work at keyboards or mobile devices to execute the various business process steps directly in the enterprise software by hand. Defects are manually noted and typically logged in a defect tracking system.

There are several shortcomings to the manual approach. First, since all data is entered by hand, it can be time consuming for subject matter experts and business analysts. These are expensive staff resources that could be deployed on other higher value activities. Second, manual testing extends project timelines. This slows the deployment of innovation and makes business users wait longer for cost saving and revenue generating new technology. Third, the manual process is often incomplete, since the time-intensive nature means that IT teams cannot test all business processes, given their resource constraints. This lack of coverage introduces technology risk in a company's business processes. Finally, if business process validation is done manually by IT teams, then business requirements and processes have to be unambiguously documented in advance, which is a time-consuming task.

Automated Business Process Validation relies on software to execute the various business process steps directly in the enterprise software systems in an automated fashion. BPV software automatically uses standard business process data during the validation, and interprets the correctness of each transaction and result. Defects are automatically noted and logged.

With BPV software, such as that provided by Worksoft Inc., the business process must first be “captured” in the BPV software system so that it can be automatically executed. This amounts to performing the business process once in the enterprise system with the BPV software running in the background to capture the process. Once the business process is captured, BPV software allows the business process automation to be modified with very little effort. Some BPV software have object-oriented designs that allow sub-processes to be shared among different end-to-end business processes, and business process automation can be easily copied and modified. This last feature is particularly helpful when companies have variations of business processes across geographies or business units. For example, an order shipment process in Europe may differ slightly from the same process in North America because there are differences in compliance requirements and Bills of Lading. There is no need to capture the second process end-to-end for automation purposes. The first process can easily be copied and modified in the BPV software. This enables companies to efficiently and quickly build their portfolio of business processes for automated validation.

An ancillary benefit is that once the business process is correctly captured, BPV software allows a complete and accurate description of the business process to be printed. This documentation is generated automatically with no additional effort and is useful for training, regulatory compliance, and other purposes. It is available on-demand and is typically very accurate because it is based on the most recent versions of systems and business practices.

BPV software largely avoids the shortcomings of manual business process validation. The automation software can be configured to validate business processes on a 24/7/365 basis, if desired by the user. The frequency of automation enables any defects in underlying business systems and interfaces to be detected and repaired quickly, before business users are impacted.

Automated business process validation is a way to ensure that a company’s business processes continue to work, even when mission critical enterprise systems change.

Reference: http://en.wikipedia.org/wiki/Business_process_validation

About Worksoft Inc.

Worksoft® - an SAP® partner - is a leading global provider of business process validation software for complex, mission-critical enterprise applications. Fortune 500 companies use our solutions to lower technology risk as well as shorten project timelines, reduce costs, innovate faster, and improve business process quality. Worksoft solutions validate end-to-end business processes with high levels of automation - often exceeding 80%. Blue-chip companies across manufacturing, financial, government, energy, healthcare, retail, entertainment, and transportation sectors choose Worksoft.

Innovate Faster. We've always believed that technology innovation and rapid deployment go hand in hand. Increase the pace of innovation and lower the risk of business disruption, even as you deploy more advanced systems and cut costs. With Worksoft, your increased agility will be durable over the long haul. That's essential for long term success. It's time to find out what the Worksoft advantage is all about.

For more information, contact Worksoft at info@worksoft.com or visit www.worksoft.com.

