SAP TESTING with BQURIOUS

Enabling Business Readiness of SAP implementation with bqurious

Organization across the globe rely on SAP Applications to run their businesses. Even though these applications generate immense business value once they are implemented, getting there can be a complicated and expensive affair.

Furthermore, application complexities often grow as businesses expand –- as does the need for testing those applications before they are deployed. Therefore, time- and cost-effective testing of SAP applications is essential for Continued business success.

Enterprises fight a constant battle against backlog: competitive and market pressures drive deadlines to deliver more functionality in more locations for more products and services. While a crucial advantage of the SAP architecture is that configuration changes can be made easily to expose or modify capabilities quickly, how do you best avoid unintended consequences when it comes to changes in your configuration?

And it's not just enhancements and expansion, either. The added pressure of regulatory and audit compliance means each and every change event requires verification that critical business processes are still accurate and available.
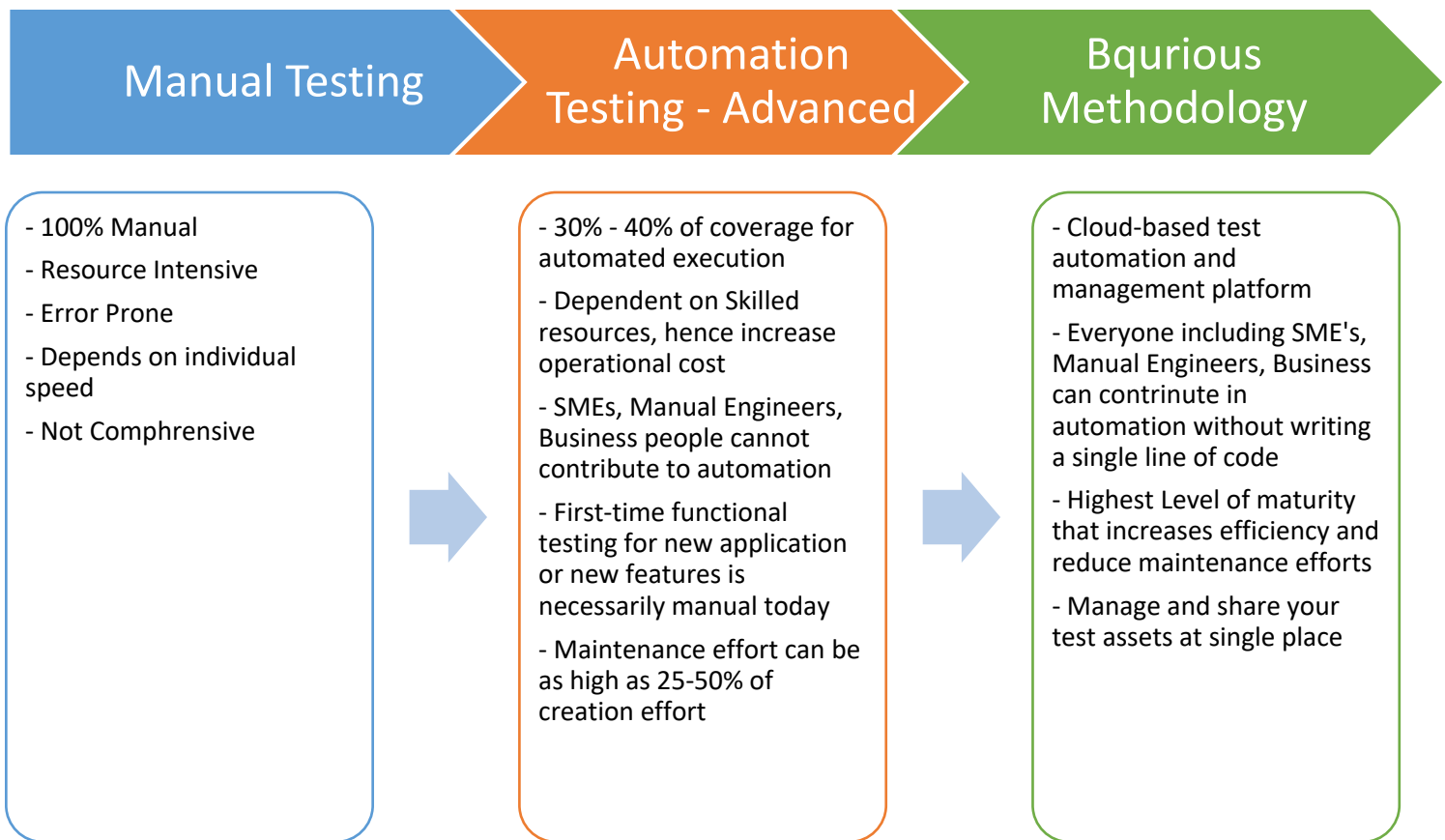
How do you ensure that your organization and systems can handle this change, the extensive testing required, all without slowing time to market? In typical testing, the same end to end process—such as order to cash or procure to pay—may be executed hundreds of times to verify all of the different types of orders, materials, delivery options and pricing rules. This testing not only consumes scarce and valuable resources, it delays the time to deliver desired capabilities that may impact revenue and/or operating costs significantly.

So how can you accelerate your upgrades to meet the demands of the business while still managing the risks that are inherent in making changes? This white paper analyzes the challenges around traditional testing strategies—manual or automated using record/play—and presents a strategy for innovation that increases your delivery velocity, improves the productivity of your business experts, and assures the availability and accuracy of your business processes after each and every change.

TEST CONSULTANCY	AUTOMATION	PERFORMANCE	SECURITY	SET-UP TCOE

bqurious

The SAP testing Maturity Stages

Across market segments, Test Automation Practice is at different maturity stages. Every stage brings up a unique learning and opportunity to empower yourself to move to the higher stage of maturity.

Manual Testing	Automation Testing - Advanced	Bqurious Methodology

Manual Testing
- 100% Manual
- Resource Intensive
- Error Prone
- Depends on individual speed
- Not Comphrensive

Automation Testing - Advanced
- 30% - 40% of coverage for automated execution
- Dependent on Skilled resources, hence increase operational cost
- SMEs, Manual Engineers, Business people cannot contribute to automation
- First-time functional testing for new application or new features is necessarily manual today
- Maintenance effort can be as high as 25-50% of creation effort

Bqurious Methodology
- Cloud-based test automation and management platform
- Everyone including SME's, Manual Engineers, Business can continute in automation without writing a single line of code
- Highest Level of maturity that increases efficiency and reduce maintenance efforts
- Manage and share your test assets at single place

Manual Testing

For most SAP customers, the majority of functional testing today is performed manually. This is primarily due to the fact that deep subject matter expertise is needed to understand the business process variations and rules, and the subject matter experts also have other responsibilities besides testing. That is why SAP SME's or SAP functional experts view testing as an extra step in the release process. While IT managers worry about system stability, users in all categories see testing as a burden that is added on top of their regular responsibilities.

To test the SAP applications manually, understanding the SAP application is required only without any external software, many organizations continue to test this way. However, Manual testing is very

- Expensive
- Resource Intensive
- Inefficient
- Highly error prone
- Impossible to achieve 100% coverage for all business workflows with different set of data
- Not scalable due to time and budget constraints

As a result, it slows down the SAP installations and SAP release process because of which organizations are slow to make enhancements in implemented SAP.
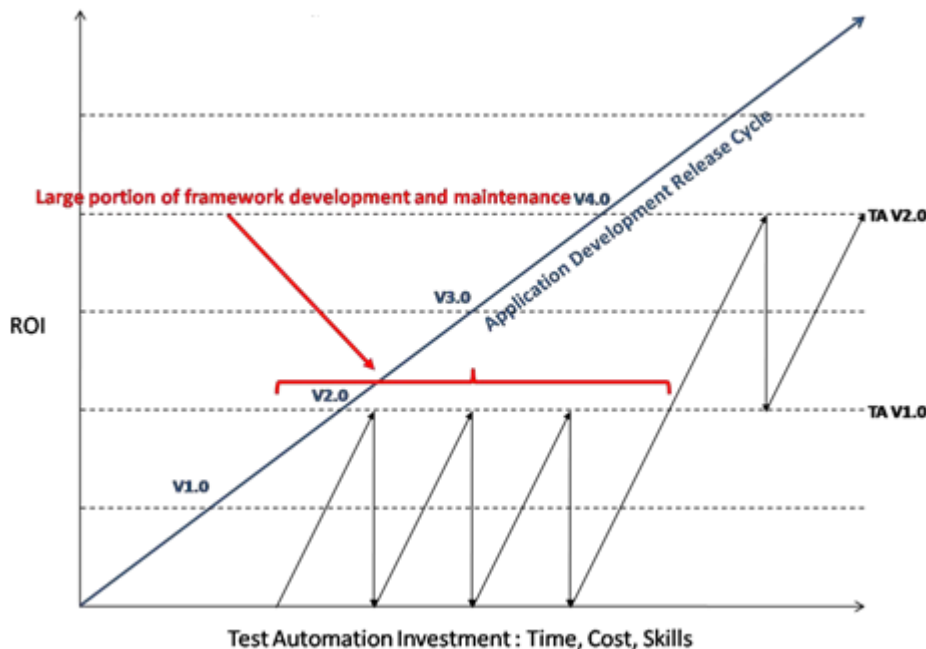
Because of these challenges, many companies have sought to automate their functional testing of their SAP solutions.

Automation Testing - Advanced

Due to the requirement of speed, management of test data and different test environments; testing needs to be very efficient and effective. This is continuously increasing demand to - automate testing and ensure that the regression testing process happens on a very regular basis (even daily),resulting in a most predictable new build every time, with almost zero manual effort being put into this task, enabling the development team to get instant feedback on the quality of their software application/ product.

Today's test automation is yet another software development process. Available tools in the market demand programming to build a scalable and maintainable test automation suits. It poses few key challenges:

1. About 15% of overall testers have the knowledge of one or more automation tool.
2. About 50% of software test automation tool purchases go unused.
3. About 85% of test automation projects are not successful.
4. Time to automate is very long (we are not talking about Record and Play back as it is just not maintainable)
5. Regression test automation complexity increases exponentially with number of releases and automation activities are stopped at about 200 scripts.
6. Skills are not easily available – every tool has its unique and proprietary approach to interact with application technologies. As far as effort is concerned, full time automation developers are needed.
7. Team best assets – Business Analyst, Functional experts, manual testers cannot automate because of limited knowledge of scripting.
8. Domain knowledge gap between functional experts and automation experts.

9. Effort of maintaining the regression test bed could be as high as 50% of the effort invested in creating the automated test scripts the first-time around.
10. With increasing complexity of test scripts, a tester's focus is diverted to programming rather than to enhancing test case quality for better test coverage. Only those tests are automated which the application has already passed, so the chances of finding new defects are reduced significantly.

Bqurious Proposition for SAP Automation

Due to the challenges imposed by conventional test automation approach, it is very critical to make well-considered choice for the optimum division of the available time and money to scale test automation process to higher maturity levels, ensuring high efficiency and in turn higher ROI from this investment.

Bqurious is platform agnostic Test automation & management platform accessible from any geography. Instead of weeks or months, bqurious can be setup in minutes and ready to use.

Bqurious is based on no-programming paradigm to build an optimized test automation engine by empowering Business analyst, SME's, manual testing team to quickly build automated test cases

by sequencing ready and reusable code assets to ensure 100% test coverage. Bqurious users use bqurious recording feature to build the automated test which means users' needs to perform their manual scenarios only once. Next time, automated tests can be run to test the same process.

Here are a few of the value propositions offered by bqurious –

Power is in hands of Business

The level of effort required to create automated test is beyond the reach of business users, SME's or manual testers who are real domain expert. Creating the automated test requires dedicated programmers. With bqurious, domain experts (Business People, SME) who use SAP everyday can record the business workflows within minutes.

Bqurious enables everyone contributing in automation which means team can now successfully automate large set of test cases up to four times faster than ever before. With bqurious, without deep down in the complexity of programming, Users can focus on the quality of test case.

Testing silos and handovers can be removed

To automate a business process with general automation solution, there are multiple handovers between business users and automation experts. As Bqurious empowers business users or domain expert to automate, business user alone can automate the business process on its own with bqurious without writing a single line of code.

Even if Business user is expected to review the automated business functionality, he or she cannot review scripting knowledge is not expected from business users.

Removing handovers between business and automation expert results into cost and time savings with better quality.
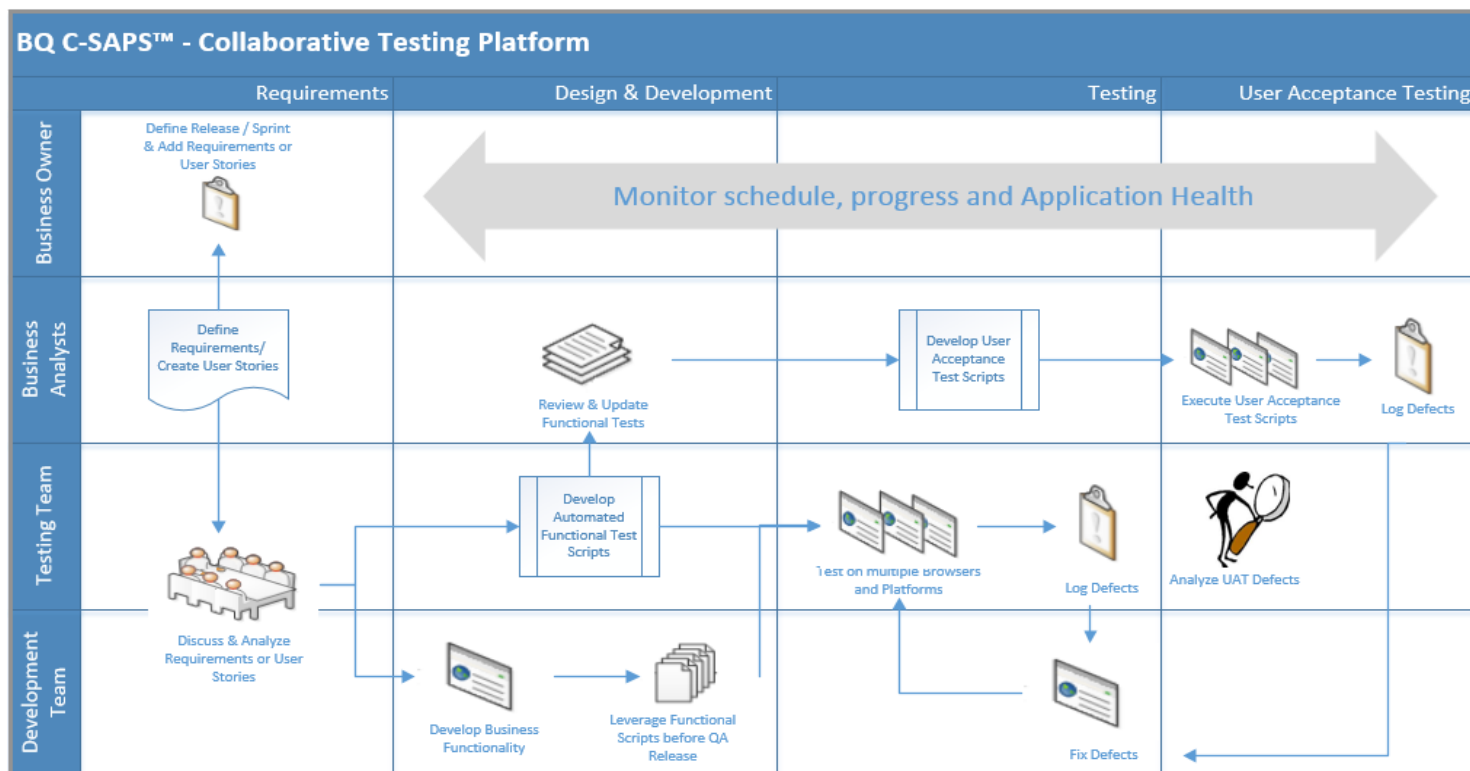
Collaborative Testing Platform

Business users or SMEs are always key assets of the organization and also have other responsibilities besides testing. In some of the organization, manual testers having domain

knowledge are supposed to perform manual testing and business users are reviewing their manual test cases and monitor the testing progress. In this scenario, how bqurious can be collaboratively used with same creating and reviewing process.

The following diagrams depict how bqurious can break the testing silos and multiple handovers to automate the business process

BQ C-SAPS™ - Collaborative Testing Platform

Bqurious brings automation close to your entire project team

Simple, Secure and Reliable

Bqurious screens are self-explanatory which enables user to quick start and leveraging the entire team for automation. Creation and execution of tests is always initiated and controlled by the actual user.

Bqurious runs on Amazon.com's EC2 cloud, which has the strongest security certification of any cloud offering available. Bqurious data is encrypted both at rest and in transit. This means that

your data is safe with us.

For more discerning users, bqurious also offers in-premise hosting which will not be accessible from outside until customer allows.

Pre-defined business processes

Many more companies are using SAP for their business and there are many shared process across SAP instances. Bqurious offers to import pre-defined business process scenarios and then user is having controlled on imported business functions which he or she can update and tweak as per his needs.

Think of bqurious as the Google Trends of ERP testing. The entire SAP community benefits from a knowledge base that is more powerful than any one company could create.

Smart Parameterization

Comprehensive testing requires exercising the same transactions and business processes for many different conditions and different data set. Bqurious allows you rapidly expand your test coverage by just adding multiple variations of data values to exercise business rules and conditions. While creating or importing your test data, user can tag the data with different environment or specific defect. While execution test data will be picked as the selected data tag.

In automation, there is need to define the data –

1. At global level. For example – same Sold-To-Party is being used in multiple business processes.
2. Want to pick from data table and execute for all the combination of test data.
3. Handle dynamically generated data. For example – Suppose you are creating a purchase order and then use this purchase order for goods receipt. SAP always generates unique purchase order numbers, so every time you run this test, you will have to use the order number you received while running the test.
4. Unique data. For example – Suppose you want to create a new item every-time and want to

use newly created item in Purchase Order.

Bqurious supports all the possible ways of parameterization with ease of use.

Smart Objects Management

Bqurious automatically build the objects while recording. Another way to build objects in bqurious with powerful point and click mechanism to identify objects in SAP.

Test recordings naturally cover only one specific case. When running the test, the system may behave slightly differently because of change in object properties. Bqurious offers the mechanism by which user can identify the change in the existing object or new object has been introduced. Bqurious enables user to manage the object changes easily at a faster pace.

Bqurious strengthens test automation suites with a centralized object container and reduces the maintenance efforts. Central Object container boosts reusability of objects across users and test cases enforcing the collaborative development practice.

Effortless test asset management

Bqurious supports integrated test management along with the automation which eliminates the need of separate test management tool to manage test assets. Bqurious manages requirements, sprints, test assets and execution results all in single place and can be shared via browser access. Bqurious also maintains the traceability between all the test assets which helps users to review the test coverage.

Bqurious supports building and usage of shareable and Re-usable Test Assets. Bqurious follows functional decomposition methodology during test case design which allows creation of reusable test artifacts like business components and Test cases. With bqurious, it is easy to use reusable components in your test cases by just selecting the component.

Bqurious supports both manual and automated script creation and execution. It eliminates the possibility to switch between different tools for manual and automation.

Bqurious brings back the focus towards testing

Bqurious helps in optimizing entire process and enforces standardization throughout the project and organization. Bqurious puts all the best practices of test automation in single place with speed and quality of test automation suite in subsequent release and cycles.

Bqurious helps in getting rid of individual tester's style. Test steps in plain English, are the actual representation of what is required to be run, which business user can very easily understand the test scripts and review for completeness.

In Bqurious, test cases can be leveraged itself as Test Documentation and can be used as induction manual for the new joiner's to the team.

Conclusion:

Bqurious is a complete lifecycle test automation solution. No Programming. No headaches. Just Quality.