EXAFLUENCE
Data Driven Influence

A prescription for your testing times - Test360 data quality automation platform

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What are the top 5 issues faced in testing software applications manually?

Time and resource constraints

Manual testing can be a very time-consuming and resource-intensive process. This is especially true for large and complex applications. As a result, it can be difficult to allocate enough time and resources to manual testing, which can lead to errors and defects being missed. Testing time increases exponentially with data volumes.

Human error

Repetitive nature of the testing process can lead to errors being missed or introduced into the software during the testing process.

Lack of test coverage

It can be difficult to ensure that all aspects of a software application are tested manually. Lack of historical data for test runs makes tracking data quality improvements difficult.

Inability to test for performance and scalability

Manual testing is typically done on a single machine, which does not give a realistic representation of how the software will perform in a production environment.

Lack of collaboration.

Manual testing can be a siloed process, which can make it difficult to collaborate with other teams involved in the software development process. This can lead to delays and errors.

#manualtesting #datatesting

How can application testing automation help companies?

Increased speed and efficiency:

Automated tests can be run much faster than manual tests, which can help companies to shorten their testing cycles and get their products to market faster.

Improved accuracy:

Automated tests are less prone to human error than manual tests, which can help to improve the overall accuracy of the testing process. By identifying and fixing defects early in the development process, automated testing can help to improve the quality of the final product.

Reduced costs:

Automated testing can help to reduce the overall cost of testing by freeing up human testers to focus on other critical tasks. By ensuring that the software is free of defects, automated testing can help to increase customer satisfaction and reduce the number of support tickets.

Increased coverage:

Automated tests can be used to test a wider range of scenarios than manual tests, which can help to ensure that the software is more thoroughly tested.
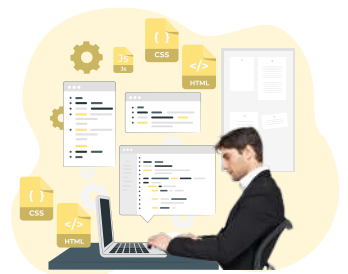
Improved scalability:

Automated tests can be easily scaled up or down as needed, which can help companies to adapt to changing testing requirements.

#testautomation #costreduction #accuracyimprovement

How can Exafluence's Test automation platform (Test360) help?

Configuration driven (Low Code) Test case execution - Test cases configured using a simple user interface are stored in a JSON structure. Test case execution is done using a workflow engine either on-demand or in scheduled mode. Connectors to databases to fetch the data for testing are available as part of the platform.

Scalable distributed processing architecture - Since test cases are executed using Python packages, it can be scaled horizontally using distributed processing in Spark. Since the modules are dockerized, it can be deployed using Kubernetes, as required.

Full history of test runs for analysis and alerts - Test case runs are stored in the database for further analysis through visualizations. The test results can be viewed through dashboards on any of the commonly used visualization tools like Tableau, Power BI. Real-time alerts can be configured as per the user requirements.

#test360 #testautomationplatform #scalablearchitecture #lowcode

Test360 in Action

A leading devices manufacturer launched a strategic initiative across departments and geographies to improve its data quality. The critical success factor was data quality assurance as data is a core component and data-driven decision making is increasing day by day.

Using Test360 platform we delivered the following

✔ **Configured test cases for KPIs** - Validation is done separately for numerator and denominator for each KPI. Test case data extraction is done using SQL and MDX queries on-demand.

✔ **Developed Data Validation Dashboard** - PowerBI dashboard developed to view test run results. Multiple filters (by KPI, Geography, date) provided for deep-dive analysis. Glossary of terms added for easy understanding. Historical performance of data validation test runs is available.

✔ **Created exception dashboard** - Records where data validation has failed (numerator or denominator does not match) are displayed in the exception dashboard for easy identification and rectification of errors.

Which companies use automation testing?

Google uses automation testing to test its search engine, email, and other products.	Amazon uses automation testing to test its website, order fulfilment system, and other services.	Microsoft uses automation testing to test its operating systems, software applications, and other products.

Apple uses automation testing to test its iPhones, iPads, and other products.	Netflix uses automation testing to test its streaming service and other products.

These are just a few examples of the many companies that use automation testing. As the demand for software continues to grow, the use of automation testing is likely to increase as well