SAP test automation: A major step in the digitization of Accenture’s ERP

Opportunity
Accenture is changing and becoming more diverse and complex through acquisitions and organic growth. This pace of change, in turn, is driving more demands on Accenture’s internal IT organization to enable the business to run better, faster and more cost-effectively. A major component of IT’s efforts to make this happen focus on Accenture’s single, global instance of SAP, which Accenture uses to run its business.

While existing SAP testing methods were meeting business needs and of high quality, the business changes occurring require more frequent and faster testing. The testing is becoming more complex, involving greater integration of different processes and applications. This posed a future challenge of not keeping pace with scaling business needs while maintaining the quality level. As with other areas of IT, internal IT and business leaders recognized there was opportunity to digitize and automate testing to respond faster and more effectively.

Solution
Favorable results with Worksoft Certify® led to a joint, global internal SAP business and IT team working virtually to perform a proof of concept (POC) of the tool. The objective of the POC was to confirm the value provided by the tool and the approach to take to achieve digitization of Accenture’s SAP testing. “The results demonstrated transformational value,” says Dan Kirner, Executive Director of Accenture’s SAP Program. “It was clear this was an opportunity to further automate testing to meet the needs of our changing and more diverse business.”

The Accenture SAP team set the objective of further automating repetitive testing activities and outlined several guiding principles. “The first was to automate end-to-end processes so as to reduce duplicate test script creation efforts and risk of inconsistencies among different teams and applications,” says Gustavo Rigiroli, Test Automation Project Lead. “The second one was to acknowledge that automation requires a rethinking of each test scenario—tactical changes are typically required to increase efficiency. And the third guiding principle was to maximize reusability concepts during build, to reduce effort to build and to maintain the test scripts.”

Working together with teams from the business, the SAP team planned the approach and timeline, leveraging an estimator also used by Accenture for clients. The day-to-day efforts were assigned to Accenture’s internal IT operations resources. The operations testing teams, organized by business process, would work globally, virtually, and in parallel over the course of
a year through the key phases of the infrastructure build, application installation, training, definition and prioritization of the testing scenarios, and lastly, execution of the testing scripts.

After coming up to speed with the tool through initial training and leveraging other Accenture resources already skilled in test automation, the internal IT operations testing teams moved forward to the next step: defining and prioritizing the testing scenarios. The highest priority was to focus on the most repetitive and time-consuming testing effort scripts running in test environments. From there, the teams began executing the testing scripts across all business processes.

With the automation tool, testing analysts were able to record the steps performed in a testing script in SAP; add logic into the scripts, such as creating variables and comparing values (using the application wizard, not through programming); and reproduce the automated script from the tool, which logs on into SAP, and execute the recorded steps.

The new automation capabilities enabled the testing teams to work through changing over from manual to automated ways by business priority. By the end of the project, the teams achieved completion of 600 test scenarios identified for automation. The success of the test automation initiative opened the door to automating production processes as well, and led to a second initiative that is automating the production execution of Accenture’s financial close process. Accenture plans to continue to further automate its most complex and critical processes.

Results
The completion of the test automation initiative confirmed the transformational value Accenture expected in terms of better, faster and more cost-effective. For the first point, better—internal IT is maintaining high testing quality as Accenture has grown. Second, faster—regression testing effort declined 60 percent, which lets Accenture deploy changes to the business faster. The reduction of test effort in some areas was much higher, for example, a 90 percent reduction in the Order-to-Cash process. And third, more cost-effective—the reduction in testing effort in turn reduced the following fiscal year’s testing budget by approximately 50 percent.

"The outcomes of testing automation have been outstanding," reports Steve Collins, Managing Director of Accenture’s Enterprise Data and Finance Portfolio. “This automation is our answer to supporting the business’s need to digitize in order to move at speed and scale as Accenture supports more new businesses and continues to grow.”

Equally important, testing automation frees up a number of Accenture’s SAP resources to move to more value-added SAP work. “Testing is extremely important, and always will be to Accenture and to our people’s careers,” notes Kirner. “But with automation we can address this need with fewer people, raise the bar on quality by having less human intervention, and free our people to advance their careers with experiences in other areas, particularly with our implementation of SAP S/4HANA Enterprise.”

Having honed test automation, the SAP team was not only able to meet the project objectives, but also use automated scripts to test Accenture’s implementation of SAP Suite on HANA, SAP’s advanced in-memory platform, as Accenture undertakes a multi-phase journey to migrate to SAP S/4HANA Enterprise. For the next phase of the journey, the SAP team will create the additional automated test scripts needed to cover the resulting new processes and functionalities.

Accenture’s internal IT organization, meanwhile, continues to transform Accenture into a digital business across the company, a necessary strategy to position Accenture for sustained growth in the digital economy.

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