BiG EVAL
High Data Quality. Mastered.

Test automation in an agile business intelligence project

V1.3

BiG EVAL test automation enables digital photo specialist Ifolor AG to implement its business intelligence solution in short, efficient release cycles, while simultaneously ensuring high data quality.
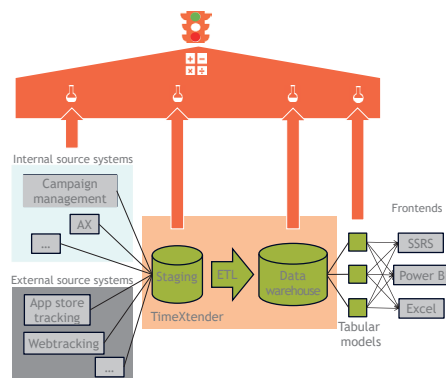
An agile business intelligence project

In replacing its old business intelligence system, Ifolor AG's goals were to achieve a greater customer focus and to create a platform that could meet the company's future needs.

Together with business intelligence specialists IT-Logix AG, an agile project culture has been established that has proved its worth to both the developers and the system's users. This culture comprises not only methods and processes, but also tools that enable the effective use of these methods and processes.

Microsoft business intelligence stack

Ifolor AG's business intelligence system landscape comprises a Microsoft SQL Server based data warehouse, which is mainly supplied by data from two instances of Microsoft Dynamics AX as well as web tracking and app store data. On top of this is a tabular analysis model with SQL Server Analysis Services, as well as Microsoft Power BI, Reporting Services, and Excel as frontend tools.

The challenge of short release cycles

Agile implementation of a business intelligence system requires a high degree of automation in order to be able to deliver releases to the various departments in short intervals. Both the development and the testing of the system components must therefore be smooth and efficient. Accordingly, Ifolor AG decided to utililze two automation solutions: TimeXtender's for implementing the DWH and ETL, and BiG EVAL for the test automation.

ifolor. FOTOS FÜRS LEBEN

Ifolor AG makes it possible for people to relive their most beautiful moments through personal-ized photo products. The company's range includes high-quality products such as photo books, photo calendars, photo greeting cards, wall decorations, photo gifts, and photos.

Founded in 1961, the Swiss family-owned business employs approx-imately 270 people and generates more than CHF 100 mio in annual sales. Ifolor AG operates in fifteen countries and is the market leader in Switzerland and Finland. Its high-quality products are manufactured at its headquarters in Kreuz-lingen am Bodensee, Switzerland, as well as in Kerava, Finland.

„By using data warehouse automation and test automation we succeeded with a very small team to develop an agile, future-proof BI landscape. Without automation this wasn't imaginable!"

Sören Schubert
Project Manager BI
Ifolor AG

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Test automation with BiG EVAL ensures data quality

Ifolor AG has used BiG EVAL software to automate several test cases that compare and validate data from the staging area, the core data warehouse, and the tabular model against the data from the source systems. This ensures that, during the ETL process, no data sets are lost, corrupted, or duplicated due to implementation errors - all of which are problems that most ETL developers face.

Both during implementation and with the publication of each new release, BiG EVAL's test cases assure Ifolor AG's developers that functions from previous releases continue to operate correctly (regression tests) and the new requirements have been implemented in a stable and reliable manner.

What previously needed to be validated manually each time can now be handled on a schedule and the press of a button - in a matter of minutes.

Validation of indicators on a multiple aggregate levels

In order to also check aggregate figures in the tabular model, Ifolor AG uses BiG EVAL's scripting functionality. Matrixes are first prepared from both the tabular model and the ERP, in which multiple indicators are grouped by product, sales region, and month. A BiG EVAL test case then compares the individual cell values and shows exactly where differences have been found.

Product	Region	Month	Units Sold	Revenue
Product A	East	Jan 17	100	
Product A	West	Jan 17	110	11000
Product A	East	Feb 17	80	8000
Product A	West	Feb 17	95	9200
Product B	East	Jan 17	20	350
Product B	West	Jan 17	5	22
....				

Product	Region	Month	Units Sold	Revenue
Product A	East	Jan 17	100	10000
Product A	West	Jan 17	110	11000
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About BiG EVAL

BiG EVAL is the leading test suite for all technical systems in which data is transported and transformed. Data warehouse systems, ETL processes, data hubs, data migrations, imports and exports, and reports and analysis are just a few examples of the software's uses. BiG EVAL utilizes test plausibility and validation mechanisms to adopt proactive quality assurance and enable short release cycles in agile projects.

About Bolt Data Solutions

Founded in Zurich in 2010, Bolt Data Solutions' mission is to give each and every company access to the high-quality data that they need in order to make correct decisions. As the makers of BiG EVAL, the Bolt Data Solutions team are proven experts in matters of data quality, test automation, and testing in agile processes.

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