

## Payroll software rethought



### *Why new payroll software is necessary despite oversupply*

[Records](#) from Athens show that the first payroll already existed 7000 years before Christ. In information technology, the first payroll was performed as early as 1950 and commercialized with the introduction of the PC in the 1980s and 1990s. The last big innovation push came with the introduction of the Internet, which allowed companies to outsource payroll.

However, the move to the cloud model is proving to be a major challenge for established payroll software vendors. Adapting the mostly monolithic payroll software to a transaction-oriented processing model requires a complete redesign of the software. Whereas legal compliance was the initial focus, cloud-enabled payroll software is oriented around business and client cases. Legacy software must be transformed into an open architecture so that it can be integrated into an ERP/HR platform. This discrepancy between the target and actual state that exists today is having an increasingly negative impact on the productivity of the payroll process.

The following objectives were pursued in the redesign of the payroll software:

- Application data is determined by business cases
- All wage data is calculated from the business case data
- Multi-client capability of business cases, wage calculations and data evaluations
- Wage definition is interchangeable between countries, industries, and companies
- Wage software can be integrated as a component in HR/ERP systems

The result is the Payroll Engine web service with a programming interface ([REST API](#)) that can be used by HR/ERP systems. Customer data is captured on a case-by-case basis and projected into the payroll period as wage data in the payroll run. The wage definition is based on rule layers implemented by different countries, industries, and companies. With the Payroll Engine Ecosystem, a marketplace is available for the publication and procurement of regulations.

With novel approaches, we have created further innovations that have the potential to permanently change the nature of payroll software. This includes the test-driven development of regulations with automated verification of wage results. A flexible set of regulations (business cases, wage types, reports...) enables full automation of complex wage cases. Due to the historization of mutation data, retroactive mutations and forecast scenarios are possible without restrictions. With the trade and exchange of country and industry regulations, the payroll software has arrived in the modern age.