

## Payroll software rethought



*Why new payroll software is needed despite oversupply.*

[Records](#) in Athens show that the first payroll existed as early as 7000 years before Christ. In IT, the first wage was calculated as early as 1950 and commercialized with the introduction of the PC in the 1980s and 1990s. The last significant innovation push came with the introduction of the internet, which allowed companies to outsource payroll.

However, the shift to the cloud model turned out to be a major challenge for established payroll software companies. The adaptation of the mostly monolithic payroll software into a transaction-oriented processing model requires the complete redesign of the software. While state compliance was the focus at the beginning, cloud-enabled payroll software is oriented towards company 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.

In our effort to rethink the payroll software, we have pursued the following goals:

- Application data is determined by business cases
- All wage data is calculated from business case data
- Business cases, wage calculation and data evaluations are multi-tenant capable
- Interchangeability of wage definitions between countries, sectors and companies
- The payroll software can be integrated as a component into HR/ERP systems

The result is the *Payroll Engine* service with a programming interface ([REST API](#)) that can be used by HR/ERP systems. The tenant data is recorded on a case-by-case basis and projected into the calculation period as wage data in the wage run. The wage definition is based on layers of regulations implemented by different countries, industries and companies. With the *Payroll Engine* ecosystem, there is a marketplace to publish and obtain regulations.

Thanks to novel approaches, we have created further innovations that have the potential to permanently change the nature of payroll software. These include the test-driven development of regulation, with automated verification of wage results. Thanks to a flexible regulation model (business cases, wage types, reports...), a complete automation of complex wage cases is possible. By historizing the mutation data, retroactive mutations and forecast scenarios are possible without restrictions. With the trade and exchange of country and industry regulations, payroll software has arrived in the modern age.