Company Relies on [VA Smalltalk](#) to Provide 24/7 Human Resource Management to its Customers

[HRworks](#) CEO and Founder, Thomas Holzer had an idea for creating a tool that would make it easier to track and calculate travel expenses, absences and equipment administration in Germany and with that idea founded a consulting firm in 1995.

The German legal system includes a wide range of complex rules which have an impact on the travel expense calculations for employees who make trips on company business. The money spent cannot simply be reimbursed to the employee. There are per diems to calculate, formulas for meal allowances and a large variety of norms, terms and exceptions to consider.

Holzer evolved the company from a consultancy and created the first HRworks product using IBM's VisualAge® Smalltalk in 1998. In 2005, Instantiations assumed responsibility for ongoing development of the VisualAge Smalltalk technology base. The result was a new, modernized, VisualAge-based product called VA Smalltalk™ and HRworks quickly upgraded to the new product

> *"The fact that VA Smalltalk is very stable and robust allows us to run our product HRworks reliably 24/7."*
> *Thomas Holzer.*
> *CEO, HRworks*

HRworks continues to develop their products using Instantiations' VA Smalltalk. Since the development of the first version of the HRworks software in 1998, functionality has continually been added to the product and the user base has grown tremendously. HRworks currently has 85,000 users and 550 customers.

VA Smalltalk Enables Cloud-based Service

Instantiations' VA Smalltalk is used to create the HRworks web application which is licensed to customer companies as a Software-as-a-Service running on the Amazon® cloud. It is fully accessible to users via any common internet browser. VA Smalltalk provides a comprehensive integrated development environment and deployment tools with enhancements such as auto-completion code assist; a graphics, windowing and web interface; and tools to fix bugs in code as it is being developed.

Holzer indicates that the VA Smalltalk development environment and language is very simple to use with rich-robust class libraries. *"VA Smalltalk's ENVY/ Developer facilitates optimal teamwork and enables us to track any changes done in our source code. ENVY/Developer is much superior to conventional check in/out source code management systems,"* states Holzer.

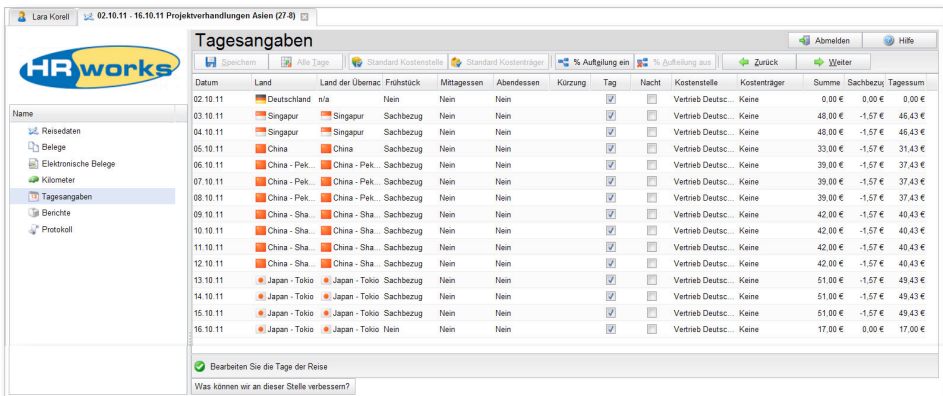## HRworks Simplifies Travel, Absence and Expense Tracking

The HRworks application provides customers with functionality and ease-of-use that makes their work easier. Using VA Smalltalk tools, developers created a rich user experience for the HRworks web application. Customers use HRworks to enter the receipts from business travel and track expenses as well as attendance and equipment administration.

The HRworks tool is used by German customers traveling all over the world. The tool handles different currencies, legal rules of what money will be paid back and calculates a variety of sophisticated reimbursement formulas used in expense tracking.

For example, Sandra Liebich is a Product Manager who travels extensively for her employer, News Aktuell. News Aktuell is Germany's leading press service and a longtime HRworks customer. Sandra points out that the HRworks software makes it very simple and convenient for her to go online and document the many costs and details of her business travel, from beginning to end of her trip, including planning, daily expenses and even receipts.

VA Smalltalk Simplifies Application Development

The entire HRworks application is built using VA Smalltalk including the user interface and the underlying business logic that creates the functionality of the product. As a fully functional, complete Interactive Development Environment (IDE) VA Smalltalk is not just a single tool, it seamlessly integrates a large number of tools and libraries of code modules integrated into a robust IDE.

The development team at HRworks researched various AJAX libraries and found libraries that let developers create desktop-like applications. They were able to generate the user interface for these rich-client interfaces using VA Smalltalk and the SmartClient Isomorphic™ company form libraries.

HRworks developers use a communication paradigm to communicate with SmartClient modules via JSON allowing developers to easily create user-interface elements like buttons, grids, and data-entry fields that run in the browser. This innovation provides users with a web interface running in the browser that acts like a desktop application.

VA Smalltalk Increases Productivity and ROI

Holzer asserts that HRworks has software innovations that make the company very successful and that couldn't be implemented without using VA Smalltalk. It is common for HRworks clients to have a wide variety of financial systems. The HRworks product uses an instance-based data structure that is designed so that a single code base is used to connect to the various financial systems of the customer. This powerful, flexible body of code lets the HRworks application quickly interface to about 60 different financial and general ledger systems.

"Our single code interface feature (built using VA Smalltalk) provides an excellent return on investment for both HRworks and our customers because it only takes about an hour to connect to a customer financial system. This is a huge advantage over our competition because they typically hard-code the

interface to each financial system," says Holtzer. *"If changes are made, then developers must again revise the custom code. This has saved us maintenance and development efforts because we aren't forced to code to individual financial systems. Thanks to the self reflection of the Smalltalk language, HRworks has been able to create a generic interface to financial systems. Without self reflection, this kind of interface could not be created in such an efficient way."*

Evolution of the HRworks Product

"An important goal of HRworks is to grow our development team because we have many feature requests from customers and have a backlog of requirements like handling scanned receipts and supporting smartphones. We would like to attract more VA Smalltalk developers to help us further enhance our HRworks product using the unique features of VA Smalltalk," says Holzer.

Instantiations' VA Smalltalk

VA Smalltalk, which is based on, and 100% backward compatible with, IBM VisualAge Smalltalk, has thousands of users worldwide. Instantiations continues to advance VA Smalltalk with active product engineering, ongoing research and development, and Technical Support.

For more information on Instantiations and VA Smalltalk please visit http://www.instantiations.com.

For information on HRworks and its products please visit www.hrworks.de.

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