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AI Innovator Objentis
Rethinking Software
Automation from
the Ground up



Schwerpunkt
Digitale
Transformation



COVER STORY

Rethinking Automation from the Ground Up

The Local Innovator OBJENTIS Software Integration. For 25 years, OBJENTIS has been supporting companies in software development and test automation. As early as 2017, the company began establishing AI as a core competence and is now among the international leaders in this field, particularly in image recognition. Generative AI is now opening up new opportunities to leverage this expertise to truly transform software automation: human-centered rather than technology-driven.

Text von Michael Dvorak Fotos von Lisa Resatz

In the office of Objentis Software Integration, located directly across from Vienna's MuseumsQuartier, software automation is being completely turned on its head – revolutionizing digital transformation in the process. The idea behind this peaceful revolution: to approach automation not from the technological perspective of applications and systems, but from the other end – from the people. From their user perspective, quite literally: from what they see on their screens and what they do on them

to manage workflows. The visual information displayed, the buttons users click, and the fields they fill out serve as both the starting point and the key. The advantage and benefits are clear: regardless of the systems to be automated – whether AS400, SAP, a Java application, Windows, Mac, Unix, iOS, Android, proprietary legacy systems, or mobile apps – this approach makes no difference at the frontend. They all provide an image on the screen that users can understand and interact with via

mouse, keyboard, or touch. All these systems and applications can be automated in the same way, using this image and the information it contains, making the process platform-independent and seamless.

"In traditional automation, the focus remains on the technology and individual applications," says Roland Tscheinig. "But if you approach it from the perspective of the automotive world, it's like focusing on all the individual parts under the hood – cables, valves, and so on,"

explains Roland Tscheinig. "But when it comes to digital transformation, the focus must always be on the people in the driver's seat."

Focus on the driver's seat instead of under the hood

The founder and CEO of Objentis, together with his team, began putting this insight into practice seven years ago with the first pilot of a tool designed to enable this revolution in software automation: Drvless. The name embodies its purpose in two ways: first, it conveys that this approach to automation is not driven by technical drivers; second, it envisions placing users in the cockpit of a self-driving car. "Everything that involves 'must-dos' and, in particular, repetitive tasks can be handled by a machine," Tscheinig succinctly explains. "Specialists should be able to focus on their productive core tasks. For this to work, however, automation must be extremely smooth to implement, and it must be conceived as human-centered. If you start with the applications, each of which needs to be examined individually and integrated via interfaces, this creates a massive overhead – continuously, for releases, new features, and maintenance."

The concept for implementing human-centered automation by Objentis was clear from the very beginning: to realign and train a variety of AI models, all open-source applications, with their specific competencies in areas such as image, text, and speech recognition, based on the perspective of the user and their screen. These models would then be integrated into a tool to create – in the literal sense – a big picture. From the very start of the pilot, the success of Drvless was based on the combination of two decisive factors. The first was the intensive development of AI, which in 2017 triggered a massive wave of innovation in image recognition, into a core competence of Objentis. The second factor was the deep knowledge of customer needs that the company had built over 18 years as a specialist in software development, particularly in the

area of testing. This expertise was exemplified in sectors like insurance, where the automation of existing legacy systems represents a major pain point and challenge.

The possibilities offered by GenAI, fueled by numerous learning

Today, seven years later, this exact combination is the key to fully leveraging the potential that Generative AI now offers and driving the new concept of automation with entirely new possibilities. Above all, the experience and learnings gained from working with image recognition provide the local innovator with a decisive advantage and a unique selling proposition (USP).

Theodor Hartmann has been involved in these learnings from the very beginning. Long before the pilot, he worked as a consultant in test automation and process consulting, eventually becoming the head of the Drvless development team. "There have always been AI models on the market that can be integrated," Hartmann explains. "However, the data used to train them cannot be directly transferred to Drvless. Similar to autonomous driving, where the complexity of the environment is difficult to fully replicate in a model, a screen has different characteristics compared to a photo. It requires extensive training of the models to identify which current model technology yields the best results for deployment on a user interface while meeting customer and, ultimately, user requirements."



"In traditional automation, the focus remains on technology and individual applications. However, especially in digital transformation, the focus must always be on the people."

Roland Tscheinig,
CEO OBJENTIS

Software Integration GmbH

Diverse Customer Requirements

This is especially true given that Objentis' customers and their requirements span a wide range of sectors. The spectrum includes insurance, healthcare, the public sector, as well as the construction and manufacturing industries. In all these industries, Drvless is used to significantly simplify and accelerate software application testing for all stakeholders through automation, while drastically reducing errors. It is also employed for 24/7 monitoring to identify and address potential application failures at an early stage. Additionally, through Robotic Process Automation, it helps free employees from the burden of unproductive routine tasks.





"Customer needs are highly individual, depending on the organization, the way they work, and ultimately the people involved."

Samereh Goodarzi,
Customer Excellence Manager
OBJENTIS
Software Integration GmbH

Given the diversity of use cases and needs, it is highly beneficial to rely not only on the relevant AI skills but also on close customer relationships – just as Samereh Goodarzi does. As an AI Consultant at Objentis for three years, she leads the area of Customer Experience & Excellence. She acts as the point of contact for demands and suggestions for new features and releases, which feed into a continuous feedback loop, and works with customers to develop new cases for optimizing automated processes.

"Staying in tune with customers and their needs is extremely important for the further development of Drvless," says Goodarzi. "Beyond industry-specific aspects, requirements vary greatly depending on the organization, their workflows, and ultimately the people involved. These needs can range, for example, from the additional integration of a custom search engine to enabling seamless copying of 2-factor authentication codes from a mobile device into the system."

Such specific demands, which would typically slow down traditional automation projects significantly, are part of the everyday workflow in the Drvless concept. A general, concise description of the respective requirements in just a few sentences is sufficient for the tool to integrate them into the program. Moreover, Drvless is self-learning and provides suggestions, such as additional elements that could be tested in the context of test automation.

There is another crucial benefit: with Drvless, an automation project never starts with a blank sheet of paper. Instead, it always begins with a jump start, leveraging the documents already available on the screen – following the same "see and understand" principle that a human would use when interacting with a screen. This factor could become particularly critical in light of the upcoming wave of retirements, where the smooth preservation of knowledge within a company will play an essential role.

Combination of AI Expertise and Customer Proximity as a USP

The expertise gained from 25 years of software testing and quality assurance not only provides a valuable advantage when domain-specific training of models is required, but also flows directly into the tool itself. "Classical text recognition is very well-suited for digitizing documents," explains Theodor Hartmann. "However, automation is not just about digitization; it's about optimization. That's why Drvless is designed to also detect potential errors.

This creates tangible added value, for example, when verifying whether an invoice is actually issued in its updated version after an invoice revision. To ensure this, automatic corrections can be deactivated during verification steps."



"A screen has completely different characteristics compared to a photo. It requires extensive model training to determine which current technology delivers the best results."

Theodor Hartmann,
Product Manager OBJENTIS
Software Integration GmbH

In addition to combining cutting-edge AI skills with years of customer proximity, and ease of use with precision, Drvless achieves another integration – delivering benefits both for business departments and for technology leaders. The tool not only significantly simplifies and reduces the workload for users but also provides CIOs, IT managers, and CDOs with a solution that can be offered to the business without requiring internal resources. "Typically, process automation tools need to be installed and integrated into the IT landscape," explains Roland Tscheinig. "This inevitably turns them into a security concern. Drvless, however, operates non-invasively, without interfering with the IT landscape. The machine is simply connected, and the customer application can be automated – all within half an hour. This is also part of a contemporary mindset for automation: the technology must adapt to the circumstances, not the other way around. AI now makes this truly possible."