





For over 35 years Acto has been helping companies in the installation and construction industry to become successful with a self-developed ERP platform. With a view to the future, the company decided in 2014 that they needed a new development strategy. In 2016 Acto opted for the solution offered by Thinkwise. With this solution, Acto will provide a low-code and model-driven foundation for the ERP software of the future.

## Acto develops the next generation ERP platform together with Thinkwise

Since its foundation in 1980, Acto has developed and delivered a complete ERP platform for project and service management to companies in the construction industry. According to Willem Verhoef, co-owner and director of the company, the level of computerization has grown steadily in recent years. He says, "The market is changing very rapidly". "The digital revolution is raging like a storm, also within the installation and construction industry. I expect ERP systems to change during the next five years just as much as they have changed during the past twenty years." With this in mind, in 2014 the management decided that Acto should take the next step and, based on their experience of more than 35 years, develop a new generation of the platform based on best practices. "Nowadays everything is about integrated and simple processes with increasing data availability," says Verhoef. "For example, an ERP system should be able to connect easily to other systems, among other things for chain integration. It must also be able to deal easily with data from sensor technology such as the Internet of Things and provide support for predictive maintenance. And despite its integrality and broad functionality the software must be very easy to use. We test all developments against our no-hands philosophy. We continually ask ourselves why a user needs to do a certain thing and whether it cannot be done smarter." He continues: "This calls for a new development

environment. We entered into a partnership with Thinkwise to develop a next-generation ERP platform with highly functional flexibility, ease of use and possibilities for personalization. This is of course a serious operation, but the first results of our efforts were received with great enthusiasm by our customers."

Because of its cooperation with Thinkwise, Acto now has a development environment that makes it possible to develop at least three to five times faster due to the presence of standard components. Willem Verhoef: "It can be seen as a box of Lego bricks. If innovative lego bricks are missing, due to rapidly changing requirements, Thinkwise will provide these in the short term in consultation with Acto."

# **Competitive advantage**

According to Verhoef, a new ERP solution should be a flexible and open platform that provides excellent support for both current and future technological developments. "We usually work with medium-sized and large companies. We want to provide a competitive advantage by deploying best practice branch models, for instance, for utility, infra, marine and offshore, industry and house construction, supplemented with specific functionality for processes with which our customers can distinguish themselves from the competition. They key objective is speed at affordable cost.

## **Faster development**

Even though Acto's current applications perform excellently in terms of functionality, the company lacks a high degree of flexibility with regard to adding new functionality. In addition, the company has to carry out separate developments for client, web and mobile devices. Acto has therefore been looking for a platform that allows them to develop much faster and at lower (management) costs. "There are a lot of low-code development tools available," says Verhoef. "The drawback is that these are usually only suitable for front end applications, such as apps. Thinkwise distinguishes itself by also supporting the back end. This means that you have a fully managed development environment for client, web and mobile. Due to the model-driven foundation, modifications can be processed much faster, also in the interface.Thinkwise was also willing to invest together with us in new products and to test new technologies. Together with Thinkwise we are also looking at developments such as virtual reality, artifical intelligence, virtual building and other developments in our market."

### **Proof of Concept**

Thinkwise made a good impression initially at Acto with a so-called Test Drive. During this test drive a small part of the application was built with the low-code platform. Willem Verhoef: "This approach is very powerful. It is impressive to see that if you want to upcycle, Thinkwise can rebuild one of your most important applications within five days. And that it also works. I had never seen this before. Thinkwise has the courage to do things differently than other software suppliers, for instance by offering the Test Drive free of charge."

After the Test Drive, a Proof of Concept was undertaken by developing an application together with one of Acto's customers. For Acto this was mainly intended to get acquainted with the platform and to check the development speed and working method. This project was also completed to everyone's satisfaction. Subsequently an agreement was entered into with Thinkwise, which marked the beginning of a close cooperation.

## **Modeling and documentation**

A project team was set up within Acto to develop an initial test application together with Thinkwise. This 'pre-project' was intended to train the development team and to check matters relating to the user interface and user experience. "We have certainly challenged Thinkwise on this point," says Verhoef. "We are also very satisfied with the fast manner of development and the functionality. The platform saves us a lot of work, for example through the standard components for multilingualism, Office365 support and user management. And the modeling and generating of software looks really good."

Another advantage that he mentions is that the software design can be documented by default in the source when modeling the processes. This produces attractive process flow diagrams according to the BPMN 2.0 process modeling standard, which is fully integrated into the development environment. This is really useful for the developers.

#### New competences

However, the new development methodology also introduces new challenges. As the emphasis is less on technology and programming, other people with different competences are required. "Your developers need to know a lot less about the technology and can focus on the users," says Verhoef. "How do you ensure that the end users can work as efficiently as possible? This is our biggest challenge. The software functions correctly, but is it useful, simple and smart?"

The downside is that the high speed of development sometimes causes delays. Willem Verhoef: "Sometimes our team cannot continue with their work, because the specifications are not yet available. The relationship between the business analyst and developers must therefore change fundamentally. This is one of the main learning points. You must have people available to define the requirements and this must be in balance with the productivity of the developers. We are now looking at which people we need to get on board for this."

#### Focus on user experience

One of the main spearheads of the new Acto ERP system is user experience. Willem Verhoef firmly believes that future ERP applications will be as userfriendly as the Airbnb and Uber apps or the websites of Booking.com and Coolblue. Willem Verhoef: "Nowadays all software must be easy to work with and look good. However, this is not the idea behind most ERP packages. We don't want to make a product that looks like an ERP package."

Moreover, ease of use must be a priority for the user to be able to work more efficiently, Acto's no-hands philosophy. "You don't want to bother end-users with all sorts of unnecessary data entry fields or irrelevant information," says Verhoef. "Nevertheless, we then accept that with much traditional ERP software we sometimes have to sit with a manual and work through fifteen screens to get something done. Make software as intuitive as possible so that instructions and manuals are unnecessary. That is the basic principle. We believe that software should be a pleasure to work with and that it should really benefit the business."

## The future starts today

For Acto the journey to the ERP of the future has already started, and Willem Verhoef already notices the first results of the efforts made. "We only started six months ago, after a very thorough selection and learning period, but are already producing the first functional applications. The plan is to have the first tangible products ready for roll out to the customers in 2018. He also sees opportunities for customers who would like to have their ideas for specific ERP functionality developed. Willem Verhoef: "Thinkwise provides us with the means to develop the most perfect ERP software. This allows us to achieve our vision for the best possible product and at the same time take into account the wishes of our customers. We can now develop many times faster and at significantly lower costs than before. This gives both Acto and our customers a competitive advantage."