REICHELT ELEKTRONIK: MAIL-ORDER BUSINESS FOR ELECTRONICS AND COMPUTER TECHNOLOGY

COMPANY

reichelt elektronik, with its headquarters in Sande near Wilhelmshaven, has established itself as a global mail-order company for electronics and computer technology. Thanks to innovative logistics and IT, developed entirely in-house, the company has become one of the leading players in the mail-order business and has consistently ranked among the **top 100 B2C online shops in Germany** with the highest turnover since 2017.

More than one million customers worldwide rely on the extensive range of over **150,000 branded items**. The company's own infrastructure in the areas of warehousing, logistics, and control, which is **programmed entirely in Delphi**, underlines the technical expertise and permeates all areas of the company—a quality feature that is visible from product development up to executive management.

CHALLENGE

reichelt elektronik demonstrates the sustainability of Delphi projects, from the long life of the code to its wide range of applications.

The core modules of the IT infrastructure, which are based on customized Delphi programs, are currently undergoing a surprisingly **smooth migration to Delphi 12.** The conversion of the individual modules has so far been carried out with little effort because external components can be replaced by Delphi's own components and the extensive access to hardware interfaces and server sockets requires only minimal adjustments.

Despite considering alternative technologies such as Java and microservices, the superior performance of the Delphi programs tipped the scales in favor of the transition to the newer version, supported by an in-house-developed framework that simplifies the migration process.

APPLICATIONS

Warehouse logistics, order picking, dispatch, merchandise management, cash register system

COMPANY

reichelt elektron ik GmbH

GENRE

Retail

TOOLS USED

Delphi

High-bay warehouse with double storage locations is precisely controlled by Delphi programs

Interim storage for picking and provisions at the touch of a button.

THE APPLICATIONS.
HIGH BAY WAREHOUSE

In the halls of **reichelt elektronik**, the self-developed software is revolutionizing storage-location management for the high-bay warehouses of various manufacturers. In contrast to the slower proprietary software, the company has significantly increased speed and availability with a self-developed solution written in Delphi. This led to a drastic reduction in delivery times to T0, allowing orders to be dispatched on the same day. The technicians now only use the rack API via XML.

The savings resulting from the cancellation of expensive service contracts and the in-house handling of all queries are considerable and **run into the millions.** The ability to manually intervene in the system if required increases transparency and control.

A remarkable detail: the technical staff is now so well experienced that they also carry out most of the maintenance of the warehouse hardware themselves and keep wear and spare parts on site or even produce them in-house using 3-D printing.

CONVEYOR TECHNOLOGY AND ORDER PICKING

Efficiency in order picking is the nuts and bolts of the mail-order business, especially when orders require a combination of different storage zones.

At reichelt elektronik, this is taken to the extreme, as the product range includes **electronic components with a size of one millimeter** (e.g., SMD resistors) as well as **large-format office supplies.**

The technicians are particularly proud of the concept and design of the interim storage areas for order picking. The ordered products are placed there from the respective warehouse and registered in the system at the touch of a button. The workers can then place them in the appropriate transport boxes in just a few simple steps. Communication takes place via Siemens S7 modules, which are controlled by the central system.
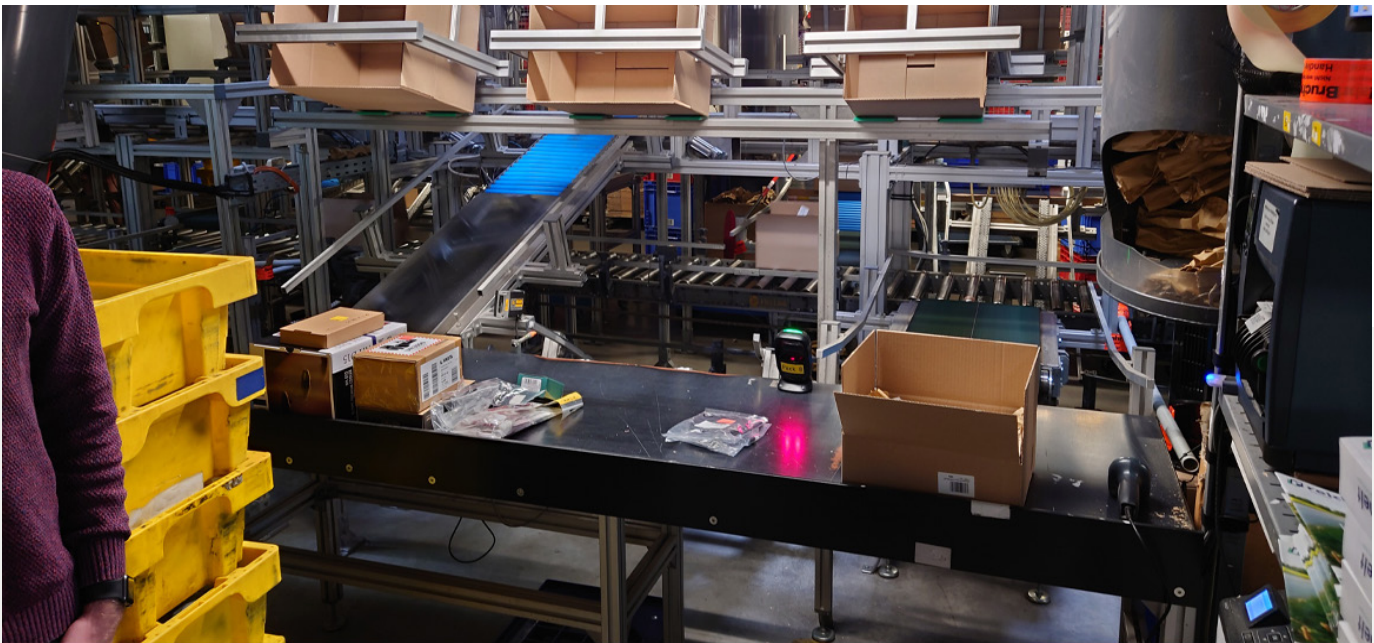
ACCESS CONTROL AND CANTEEN SYSTEM

Good programs grow with the needs of the users, so fresh ideas regularly flow in from the various departments.
This is reflected in the access control system with RFID cards developed especially for staff and coded in Delphi.
The canteen also benefits from this culture of innovation: special software ensures efficient automation for all employees.

COVID AND THE CONSEQUENCES

The lessons learned from the COVID-19 crisis have strengthened reichelt elektronik. Instead of negative consequences, the company has used the situation to implement fresh ideas and optimize its processes.

During the lockdown, reichelt elektronik experienced an unexpected boom in orders, which led to a 15-fold increase in order numbers. Despite the lack of space and the overload of the regular parcel service provider, the employees worked extra hours to make everything possible. Other parcel service providers helped out, and the in-house Delphi developers quickly adapted everything to the new server interfaces. This experience led to the construction of a new dispatch building with five truck-docking stations, which is now designed for a large number of parcel service providers.

Packaging of orders in prefabricated parcels

" We are delighted that the first migration of our existing programme modules to the new Delphi 12 version has been so successful. We are optimistic that the rest of the changeover will proceed without any major problems.'

Ulf Timmermann, **Managing director at reichelt elektronik**

REICHELT ELEKTRONIK

The passion for electronics that reichelt elektronik shares with its customers is visible in all areas of the company. Every detail, from the roller conveyors to the picking stations to the pallet lifts, is configured in-house and programmed with Delphi—proof of reichelt elektronik's technical expertise and innovative strength paired with the endless possibilities of Delphi.

You can find more information about reichelt elektronik and its innovative solutions in the following YouTube video and at https://www.reichelt.de

CONCLUSION

'There's no such thing as impossible.' reichelt elektronik lives by this credo with every fiber of its being. The company has overcome much adversity and has forged its own innovative paths in numerous areas by replacing standard solutions with in-house developments. **The high degree of independence in software development, coupled with the advantages of Delphi** and the creative realization of new ideas, have made reichelt elektronik a prime example of flexibility, resilience, and speed. They know that time is money.

WATCH THE VIDEO

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