Bitergo
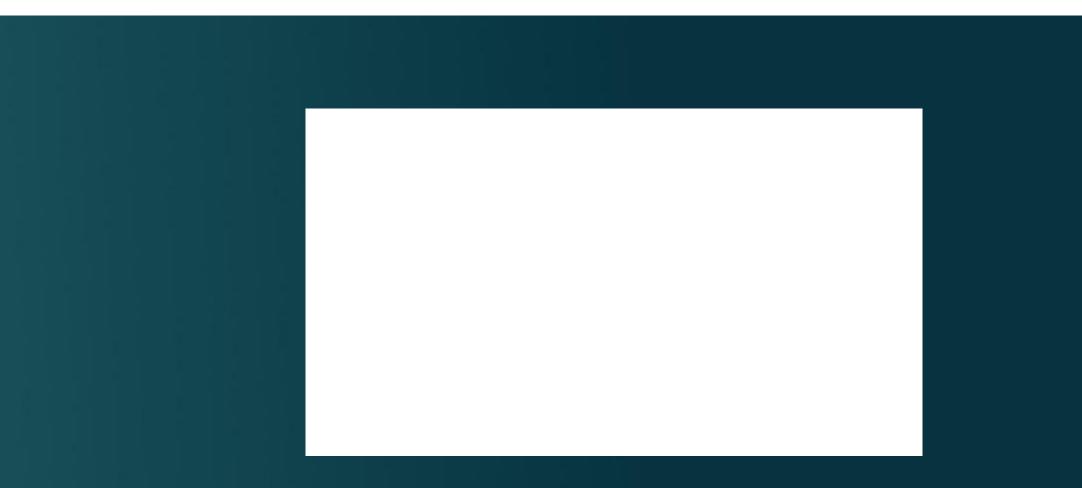
Optimum fulfillment in logistics

Mobile and autonomous solutions for logistics and eCommerce

Video "Warehouse Star in action"

Bitergo

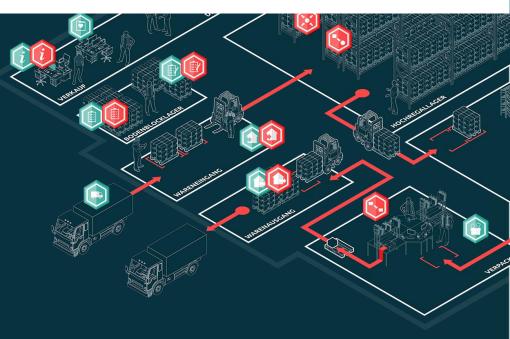|	
Founding year:	2013
Corporate name:	Bitergo GmbH
	Headquarter in Dortmund
Focus:	Warehousing, B2B, SaaS, SCM
Team:	30 FTE, fast growing ☺

More than 100 customers

More than 25.000 picks a day

More than 1.000.000 EDI transactions per month

Logistics is our DNA

Revenue: 2021 **2,4 Mio€**

2022 Acquisition Bitergo by DB Schenker

2020 Acquisition Bitergo by LB GmbH

2014 Partnership Bitergo

2012 Merger LB GmbH

2006 Fraunhofer Spin-Off

Warehouse   Software Development   EDI & e-Processes   SAP-Integration & Support   Apps & mobile Solutions

Von Robert Kümmerlen

DVZ: Welche Lösungen und Funktionen deckt DB Schenker im Einzelnen mit Bitergo ab?
Christa Koenen: Bitergo bietet umfangreiche Softwarelösungen im Bereich Logistik an, die sich durch hohe Standardisierung und Individualisierung auszeichnen. Auf einer Plattform werden zum Beispiel im Bereich „Warehouse Management" sämtliche Warenbewegungen und Bestände in der Supply Chain erfasst und gesteuert. Die cloudbasierte Software kann weltweit eingesetzt werden und vereint Apps und Webanwendungen.

Was ist das strategische Ziel der Übernahme?
Bitergo ist der ideale Partner, um einen Baustein unserer Digitalstrategie, nämlich Software-as-a-Service, weiterzuentwickeln. Unsere Vision der digitalen Supply Chain, die End-to-End gesteuert wird, kann durch Partnerschaften und Portfolio-Erweiterungen deutlich schneller Realität werden. Schenker bringt dabei die 150-jäh-

Inwieweit bietet das Unternehmen für Schenker Möglichkeiten, bestimmte digitale Tools auch kleinen und mittleren Logistikdienstleistern im Rahmen von Kooperationen anzubieten, wie beispielsweise Fulfillment oder Visibility as a Service?
Mit „Warehouse Star" bietet Bitergo eine vollständig auf Apps basierte Warehouse-Management-System-Lösung an, die innerhalb kürzester Zeit in Betrieb genommen werden kann. Dank der Integration in die Cloud kommt Warehouse Star sowohl an großen Logistikstandorten als auch bei kleinen, aber stark wachsenden E-Commerce-Fulfillment-Anbietern erfolgreich zum Einsatz – und das zu einem außergewöhnlichen Preis-Leistungsverhältnis und besten Erweiterungs- und Integrationsmöglichkeiten. Die Software eignet sich dementsprechend auch bestens für kleine oder mittlere Logistikdienstleister, die ihre Supply Chain effizienter und digitaler gestalten wollen.
Im Bereich Visibilty-as-a-Service hat DB Schenker eine eigene Lösung, die wir vor allem intern nutzen. Unse-

FOTO: DEUTSCHE BAHN

Christa Koenen
Christa Koenen ist seit September 2021 CIO und Chief Digital Officer (CDO) im Vorstand von DB Schenker. Die Volkswirtin kam 2004 zur Deutschen Bahn. Sie arbeitete unter anderem für die IT-Tochter DB Systel, von 2014 an zunächst als Finanz-Chefin und seit 2015 als Vorsitzende der Geschäftsfüh-

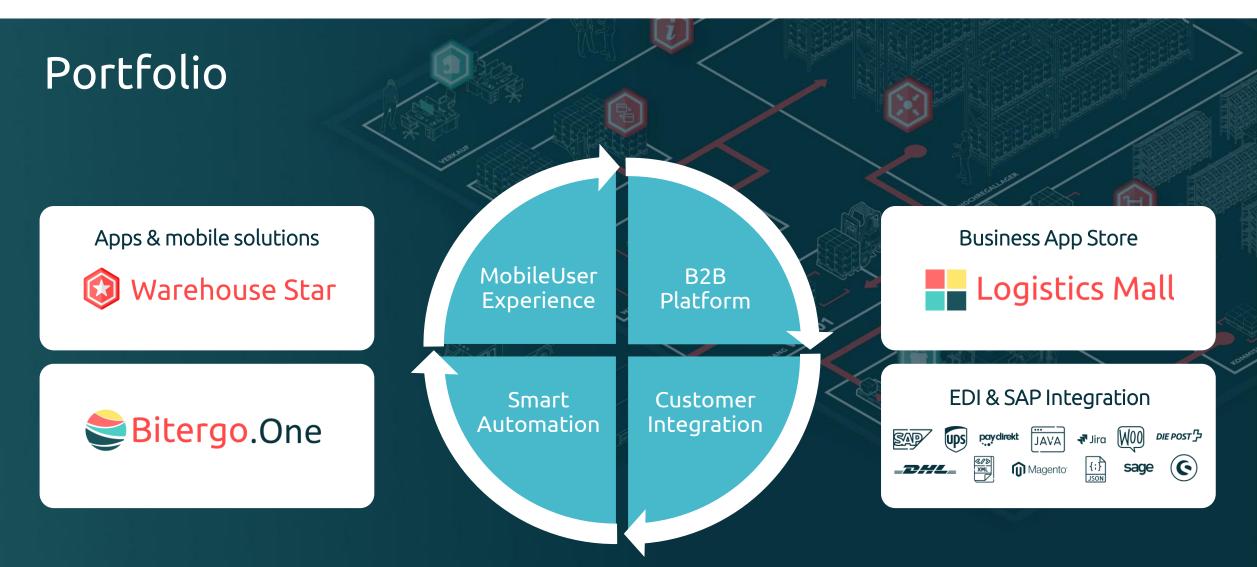„Together, the vision of the digital supply chain succeeds"

Our mission

Our way of digitalizing supply chains creates maximum benefit and digital added value for our customers and their customers. In doing so, we rely on innovative end-to-end technology, partnerships with innovation drivers and consistent customer orientation

A selection of our customers and partners ...

Portfolio

Apps & mobile solutions

Warehouse Star

Bitergo.One

- MobileUser Experience
- B2B Platform
- Smart Automation
- Customer Integration

Business App Store

Logistics Mall

EDI & SAP Integration

SAP · UPS · paydirekt · JAVA · Jira · WOO · DIE POST
DHL · XML · Magento · JSON · sage

The right partner for your project, because…

✓ Warehouse Star is a highly standardized, cloud-based warehouse management solution that guarantees the highest availability and security requirements.

✓ In conjunction with Bitergo.One, a seamless integration of high-bay warehouses and automation technology is given.

✓ With the help of SaaS Cloud Technology, rapid onboarding is possible and warehouses and sites can go live within a few days.

✓ Our EDI experts reliably implement any ERP interface with existing connectors.

✓ Warehouse Star consists of flexible, interconnected apps that enable ergonomic user guidance ("the right app for every task") on mobile devices and via the webbrowser, as well as easy expandability even during operation.

Mobile and autonomous solutions
for the digitization of your processes

The right app for every task

Bitergo

Information

Corrections

Information

Master data

Repacking

Storage

Inventory

Incoming goods

Picking

Outgoing goods & shipping

Pick & Pack

Included core functions
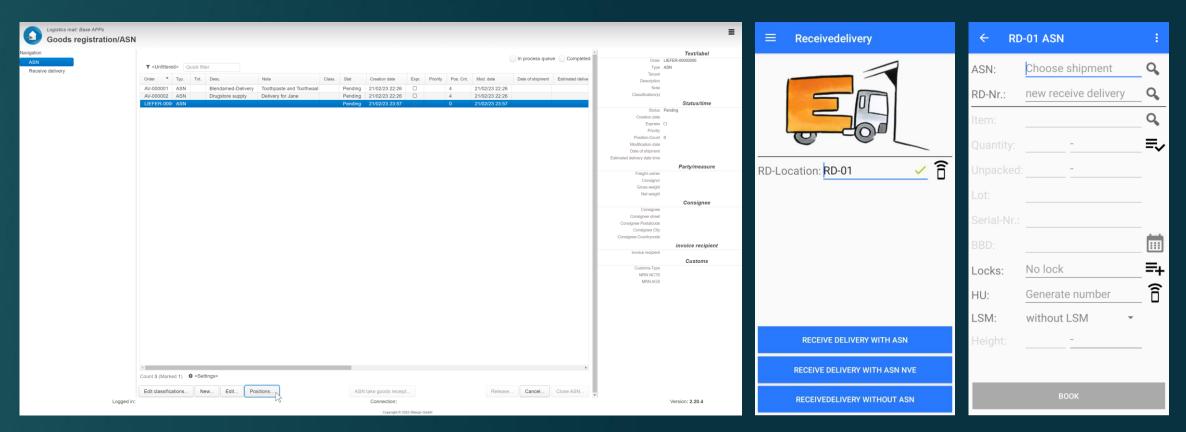
- Batch management
- Serial number management
- Best before date
- Replenishment Management
- Cross Dock
- Multi-client-capability
- Loading equipment management
- Value Added Services
- Freely definable packaging
- Master data import via Excel
- Open interface via REST-API

Potential additional benefits

- Multi-depth storage capability
- Multi-depth storage
- SAP and EDI connection
- Forklift control system
- Vendor Managed Inventory
- Customs

Incoming goods
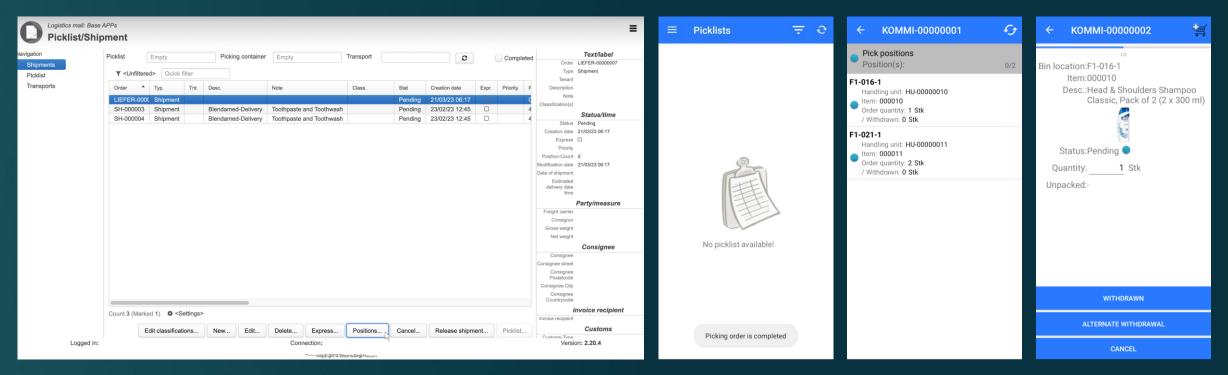
Scheduling ASN in the Incoming goods web app

Receiving at the ramp with the Incoming goods mobile app

Delivery and picking

We map the right picking strategy for each customer.

Import of orders and creation of single and multi-order picking lists

Picking the positions in the picking area

Packing and outgoing goods

Packing of picked articles

Outgoing goods mobile app – individual booking of the packages

Reporting App with Excel export and open API

Cockpit

Freely configurable cockpit for visualization of KPIs

Test for 30 days without obligation

Our customer centre

Get started immediately in three simple steps

✓ Test all features of the warehouse management apps for 30 days
✓ Get started right away without having to enter your bank or credit card details
✓ After the expiry of the test period, simply transfer your warehouse data into the system
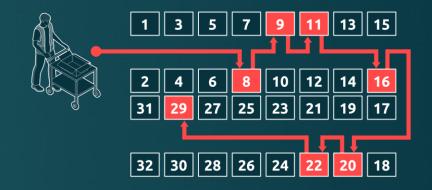
① Register   ② Confirm   ③ Finished

First name *

Last name *
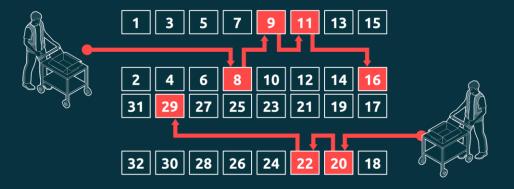
Email *

Company

Phone

Password

Test for free now!

Wayfinding and interaction during order picking

Shortest path routing

The existing storage bins are provided with an additional field "Way number". This is a number and it is ensured that all storage bins also have a unique path number. The routing is then done according to a simple sorting of the numbers. This simple way-numbering algorithm is sufficient in many cases. But in case of complex layouts not necessarily the optimum is reached! The map algorithm is suitable for this. It enables an allocation of the storage bins on a storage map and the consideration of obstacles, walls, columns, etc., in order to really find the shortest way.

Pick item assignment
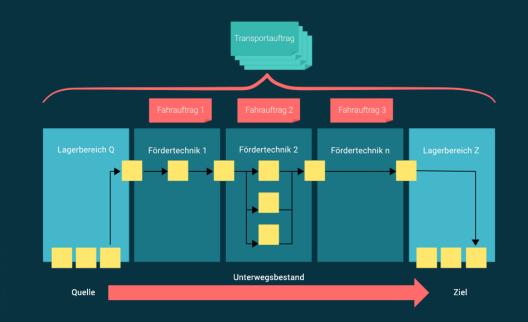
When using several order pickers, it is desirable that the walking paths are not only arranged in the correct sequence, but are also as short as possible. Depending on the picking strategy (e. g. parallel processing of single-item orders), the "cluster density algorithm" can be used to ensure that positions 9,11,19,20 are not assigned in example A above, and that a significantly longer route would therefore have to be covered for 4 positions than with the assignment 8,9,11,16 shown. It is important to parameterize a suitable interaction between the assignment of picks and the "shortest route finding".

Bitergo.One

Our material flow computer establishes manufacturer-independent and scalable communication to the PLC and offers at the same time:

- Mapping of the confeyor technology by configuration

- Customer-specific adaptations of the software are only necessary in individual cases

- The warehouse is understood as a block location and the optimal location determination is carried out by the material flow computer

- Order management of the stacker cranes, sorters, conveyor systems and AGVs

- Transport control e.g. via counters or path costs

- Monitoring of storage and retrieval via the stacker cranes

MFC-projects and examples

Bitergo.One

Material flow control and **retrofit projects**
for automatic high-bay racking and conveyor technology in industry

Continental   WELLA   P&G   rieker   PEPSICO

Innovative special solutions for **AGV and shuttle systems**
in the field of **Smart Factory & Internet of things**

bdr | DEMATIC   Fraunhofer

Connectivity rocks

Our tethering capabilites are fantastic.

Interfaces to all common ERP systems and Webshops are our absolute passion.

In particular, we connect SAP Systems quickly and securely – classic IDocs as well as S/4 HANA Cloud API via our EDI Gateway.

EDI

Bitergo has been activ in the market as a specialist in digital business processes for over 10 years and offers holistic solutions for implementing and optimizing supply chain management processes.

Our modules for electronic data interchange offer all the functions you need to implement both simple and complex EDI processes .

Our customers can put together an individuall application scenario – for example, for electronic order processes or electronic invoice processing. As requirements grow, these can be expanded upon with additional modules at any time.

SAP

Integration & Support

We have many years of experience in working with the SAP products LES, WM & EWM.

We offer a SAP Helpdesk in line with your individual customer needs.

We will also implement the connection to your web or EDI portal.

Bitergo

The hardware for your mobile processes

With our **Android-based mobile apps** and **selected hardware from leading scanner manufacturers** you are always well equipped on the shop floor.

Our **partner for hardware solutions - GOD Barcode Marketing -** can draw on **many years of extensive experience in the field of AutoID.**

A small selection …

Gigaset Industrial smartphones

Point Mobile PM85

Honeywell EDA52

Zebra ZT410

Honeywell PD45

Sato CL4NX

Zebra MC9300

Zebra TC57

Nimmsta
Back of hand scanner

GX4 – Highlights

Gigaset

Design:
Slim rugged design

Processor:
MTK G99 Octa-core

Operating System:
Android™ 12 (Update plan 13 + 14)

Battery:
Fast chargeable and enduring 5000 mAh removable battery

Wireless charging:
Supports wireless charging up to 15W*

Dual camera system:
48 MP main camera + 8 MP wide angle

Front camera:
16 MP for high resolution selfies & video calls

Display:
6.1" HD+ V-Notch display 60Hz with Corning Gorilla Glass 5

Memory:
4 GB RAM and 64 GB internal memory

Triple-Slot:
Dual-SIM + memory extension up to 512 GB

Unlock options:
Face recognition and fingerprint scanner

Contactless data transfer:
NFC + Bluetooth 5.1

Optical signaling:
Message LED

Function key:
Programmable for fast App access

Others:
IP68

GX6 – Highlights

Gigaset

The most elegant 5G rugged smartphone

MADE IN GERMANY

Design:
Elegant & robust design: Slim profile and a sleek look – whether Titanium Black with copper-colored elements or Titanium Grey with silver-colored elements

Connectivity:
Safer and faster wireless connectivity by ultra fast 5G, Wi-Fi 6, Bluetooth 5.2 and NFC

Durability:
Ruggedized to military standard MIL-STD-810H + IP68 dust & water protected

Battery:
Powerful and enduring 5000 mAh removable battery: Supports super fast charging up to 30 W* and wireless fast charging up to 15 W*

Rear camera:
Flat dual camera system with dual LED flash:
50 MP wide angle with Optical Image Stabilization (OIS) + 2 MP macro

Front camera:
16 MP front camera for high-resolution Videocalls and Selfies

Display:
Large 6.6" FHD+ Punch-Hole display: High refresh rate up to 120 Hz, Brightness boost at sunlight (550 nits) and Corning® Gorilla® Glass protection

Processor & storage:
High-performance 2.4 GHz Octa-Core processor MediaTek Dimensity 900 5G + 6 GB RAM and 128 GB internal memory

Triple-Slot:
Dual-SIM + Memory extension up to 1 TB

Biometric unlock:
Fingerprint scanner on power button + Face recognition

Operating system:
Android™ 12 (Upgrade plan to 13 and 14) + 5 years of security updates after launch

Other special features:
Programmable function key, Gigaset BatteryLife+ Technology, Message LED, Wet hands and gloves compatibility, Noise-cancelling dual microphone, HD-Voice support, Extra loud speaker with up to 110 dB at 5 cm, Dual antenna GPS, Barometer sensor, Fast USB 3.0 Type-C, USB On-The-Go (OTG), 3.5 mm headphone jack, FM Radio, Eyelet for a wrist strap, Integrated camera-barcode-scanner

Bitergo

Contact

Bitergo GmbH

Saarlandstraße 117

44139 Dortmund
Germany

Roland Sprick
p: +49 231 / 878008-0
m: r.sprick@bitergo.de

Andreas Trautmann
p: +49 231 / 878008-0
m: a.trautmann@bitergo.de

www.bitergo.de

www.warehouse-star.de