



Kardex Investor Day 2023

CH-Arbon, 7 November 2023

Agenda

1. **Kardex AutoStore Update**

Daniel Hauser – Managing Director Kardex AS Solutions AG

2. **Kardex Today and Tomorrow**

Jens Hardenacke – CEO Kardex Holding AG

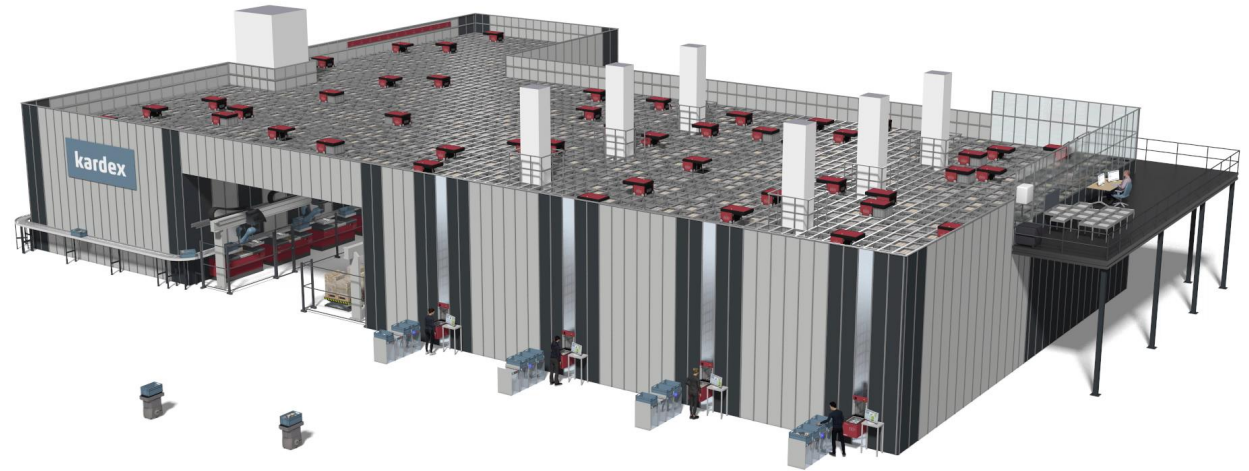


Kardex Investor Day 2023 – AutoStore Update

CH-Arbon, 7 November 2023

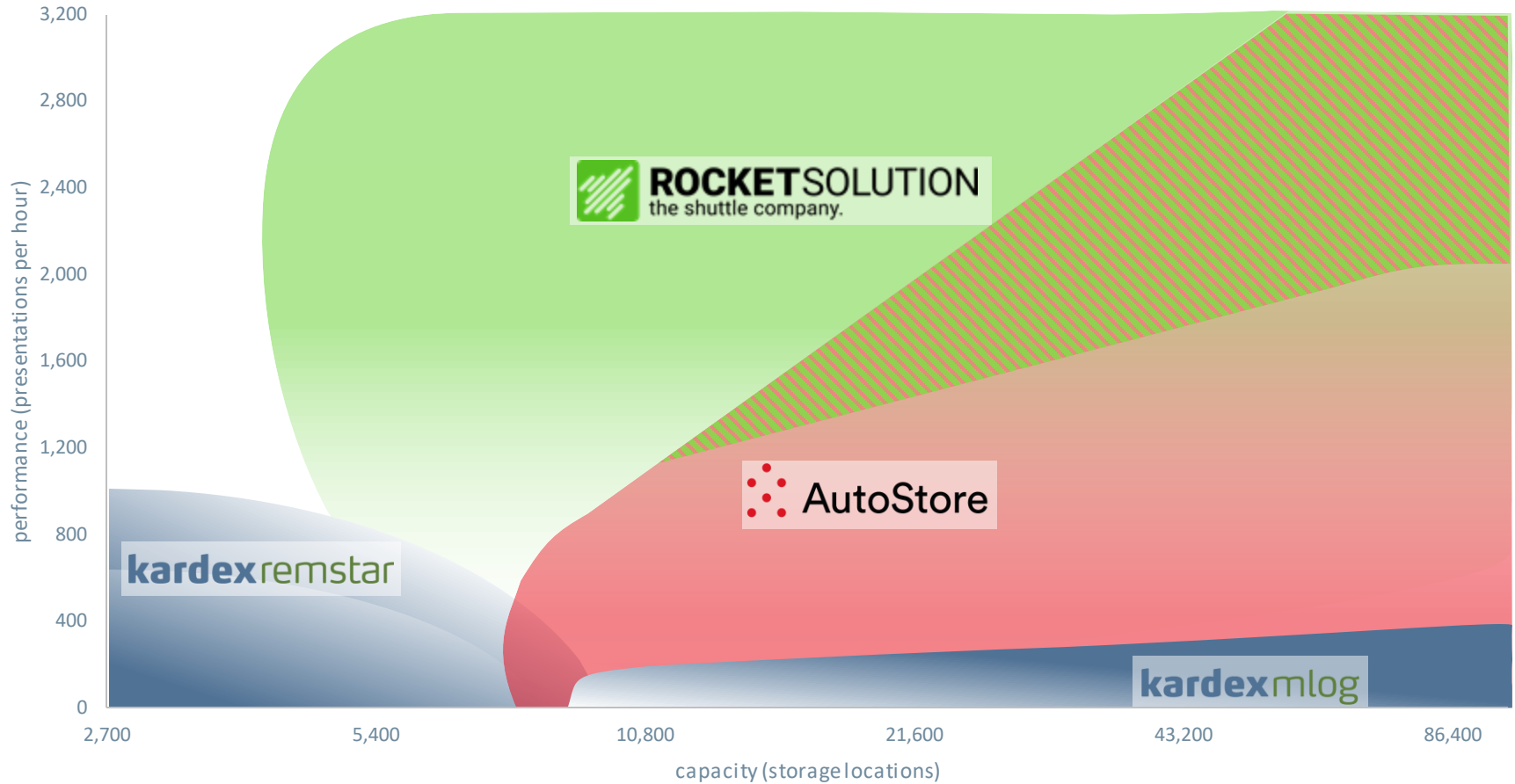
Agenda

- Positioning
- Why Kardex
- Status & Outlook



Positioning

Kardex Positioning in Light Goods Logistics with sold Projects



Why Kardex

Why Kardex – Differentiation from competition

Differentiation	Global organization	Focus & Speed	Service	Innovation
Key differentiation factors	<p>Subsidiaries in 30 countries</p> <p>Contract with the local Kardex subsidiary</p> <p>Leverage existing customer base</p>	<p>Vast + proven experience</p> <p>Dedicated, specialized team</p> <p>Speed in customer response</p> <p>Efficient with small projects</p>	<p>Professional global standardized setup</p> <p>Local support, dense service network</p> <p>AutoStore service done by existing organization</p>	<p>Cleaning station for robot sensors</p> <p>IPA – Intuitive Picking Assistant</p> <p>Kardex Pick&Pack solution</p> <p>More to come!</p>

Innovation – Sensor Cleaning Station

- Fully integrated cleaning system from Kardex.
- Removes dust and contamination.
- Each robot drives to the cleaning station once a day. The blow-off nozzles are activated automatically.
- After a few seconds, the cleaning process is finished.
- The robots can work without interruption for longer, which increases the overall availability of the system.



Innovation – Intuitive Picking Assistant (IPA)



Innovation – Kardex Pick&Pack integrated AutoStore workstation

- Pick robot on gantry serves 2 AS ports
- Up to 3 sizes of order-cartons
- Up to 400 order-cartons/h
- Cartons are erected, filled, closed and labelled
- Port to port operations possible
- Very compact footprint



Status & Outlook

Choice of projects in operation

Arbeitsschutz-Express

Germany, Leipheim
E-Com / Safety Clothing



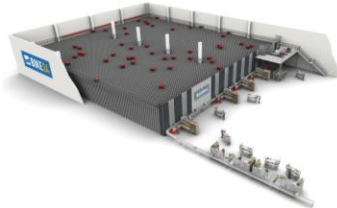
First sold project

54'000 bin locations
26 R5+ robots
6 carousel ports

Live since July 2022

Bike24

Spain, Barcelona
E-Com / Bike parts



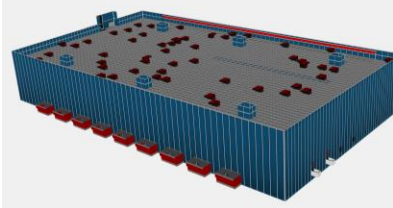
Largest (bins) installation

90'000 bin locations
50 R5 robots
10 carousel ports
Conveyor system

Live since March 2023

Cutter & Buck

United States, Seattle
Apparel



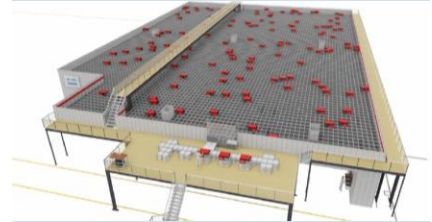
Important reference in US

39'728 bin locations
54 R5 robots
9 carousel + 2 conveyor ports
Conveyor system

Live since August 2023

Arvato

United Kingdom, Hams Hall
3 PL

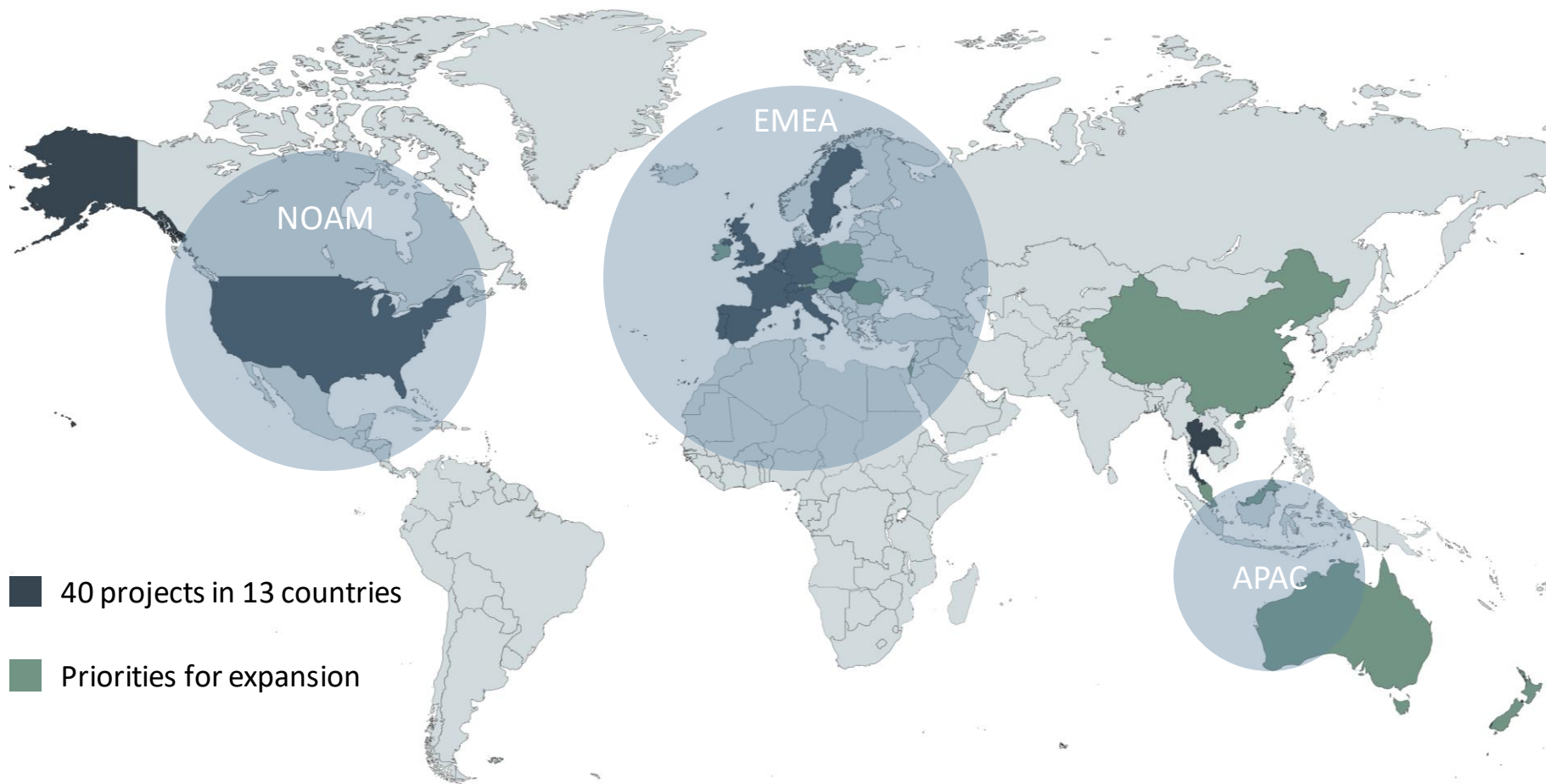


Fastest system: 3'200 bins/h

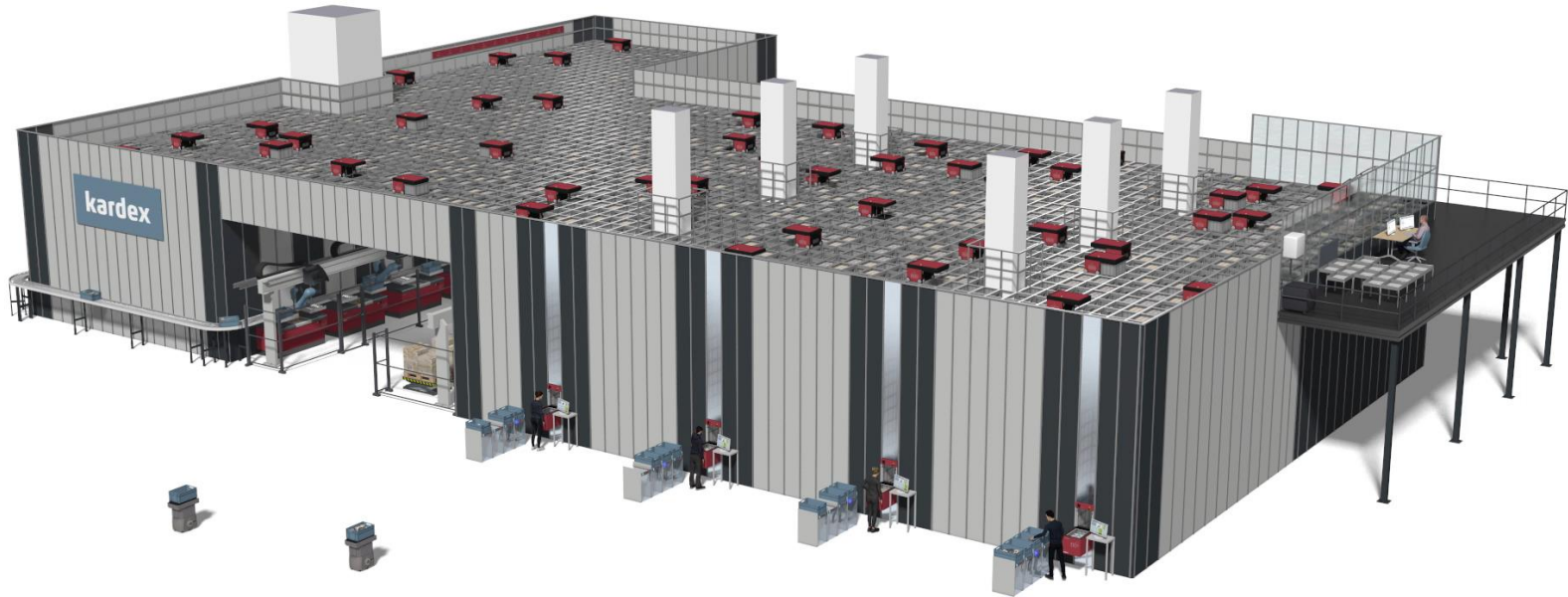
65'000 bin locations
130 R5 robots
11 carousel + 8 conveyor ports

Live since August 2023

Geographical expansion and market split

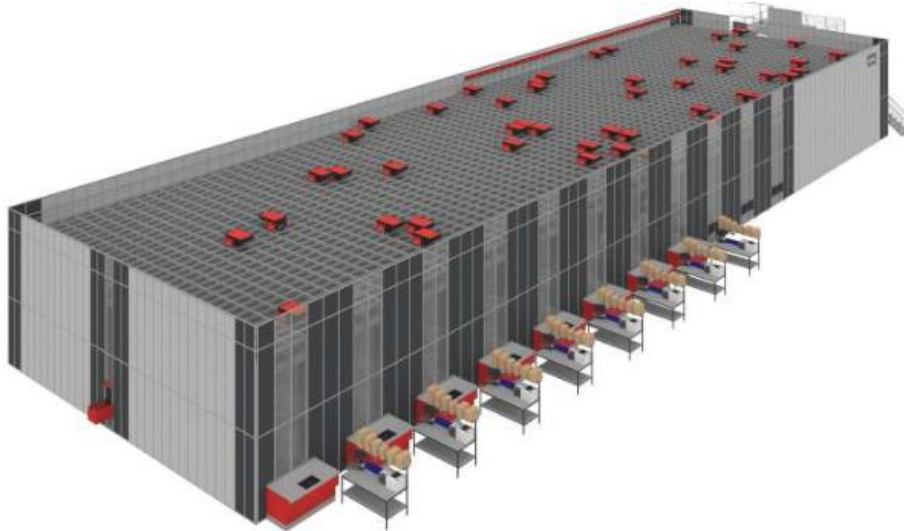


Thank you very much for your attention!



Factory Tour @ MS Direct

- AutoStore with
 - 30'000 bin locations
 - 48 R5 robots
 - 8 Carousel Ports
 - 1 Conveyor Port
 - Fire extinguishing system
- Live since May 2023



- Factory Tour in 3 groups, guided by
 - Marcel Guerdi, Sales Manager
 - Dominik Kathriner, Project Manager
 - Daniel Hauser
- Highlights
 - Picking of customer orders
 - View into the inside of the AutoStore system
 - Functional explanation at Demo-system
- Pictures
 - are allowed
 - Please avoid people and products



Kardex Today and Tomorrow

Investor Day, November 07, 2023

Why Kardex?

Trends in Intralogistics



Effects of these Trends



Industry 4.0



Efficiency



Effectivity



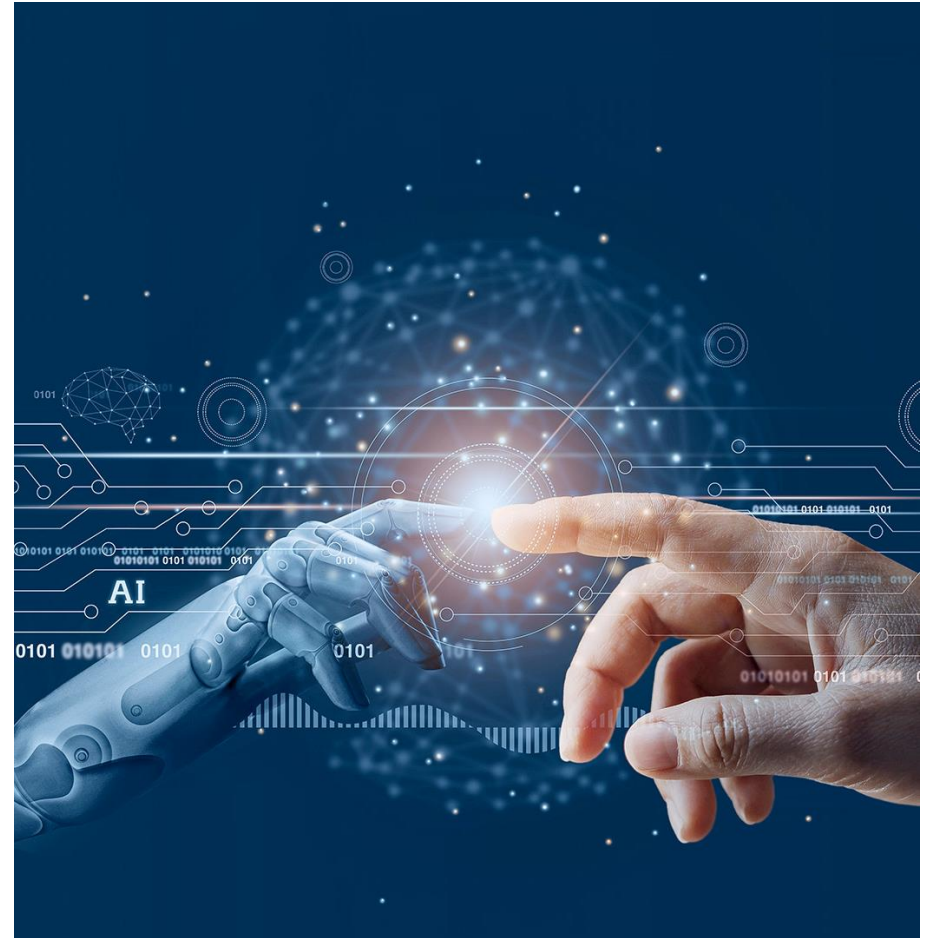
Collaboration



“New” technologies



Trend & Innovation



Market Overview

Biggest intralogistics markets



Source: [Warehouse Automation Market to reach \\$41 Billion by 2027 \(thelogisticsiq.com\)](https://www.thelogisticsiq.com)



Top 20 worldwide materials handling system suppliers

2022 Rank	2021 Rank	Company	Worldwide 2021 revenue (million USD)	Worldwide 2022 revenue (million USD)	Percent change 2021 - 2022	Three-year change	Headquarters
1	1	Daijuku Co., Ltd.	4390	4549	3.60%	0%	Osaka, Japan
2	2	Dematic (KION Group) **	4299	4063	-5.50%	26%	Atlanta
3	4	Honeywell Intelligrated	2940	2336	-20.50%	16%	Charlotte, N.C.
4	5	Vanderlande (*TALG)	2800	2200	-15.40%	5%	Veghel, The Netherlands
5	6	Knapp AG	1840	2139	16.30%	48%	Hart bei Graz, Austria
6	NA	FORTNA	N/A	2100	N/A	N/A	Atlanta
7	7	Murata Machinery Ltd.	1780	1970	10.70%	32%	Kyoto, Japan
8	3	SSI Schaefer Group **	2036**	1922	-5.10%	N/A	Neunkirchen, Germany
9	10	Interlake Mecalux (*MECALUX)	1177	1576	33.90%	106%	Barcelona, Spain
10	9	WITRON Integrated Logistics	1242	1200	-3.40%	40%	Parkstein, Germany
11	11	Beumer Group GmbH	1120	1070	-4.50%	-24%	Beckum, Germany
12	N/A	stow Group	N/A	1043	N/A	N/A	Spirene-Helkin, Belgium
13	13	TGW Logistics Group GmbH	924.5	991	7.20%	-1%	Marchtrenk, Austria
14	14	Swisslog AG	797	827	12.20%	28%	Buchs/Aarau, Switzerland
15	17	Bastian Solutions (*TALG)	426	775	81.90%	91%	Carmel, Ind.
16	15	Fives Intralogistics (Fives Group)	664	692.4	4.30%	26%	Paris, France
17	16	Kardex AS	514	606.7	18.00%	30%	Zurich, Switzerland
18	N/A	Symbotic	N/A	593.3	N/A	N/A	Wilmington, Mass.
19	19	AutoStore AS	327.6	583.5	78.10%	N/A	Nedre Vats, Norway
20	N/A	Element Logic AS	N/A	527.1	N/A	N/A	Kjøfta, Norway
Source: Modern Materials Handling			Total \$28713.1	Total \$31774	10.70%		
** A Toyota Advanced Logistics Group company							
** Converted from official public number							

Source: [Top 20 materials handling systems suppliers 2023 – Modern Materials Handling \(mmh.com\)](https://www.mmh.com)

The Kardex family

kardex

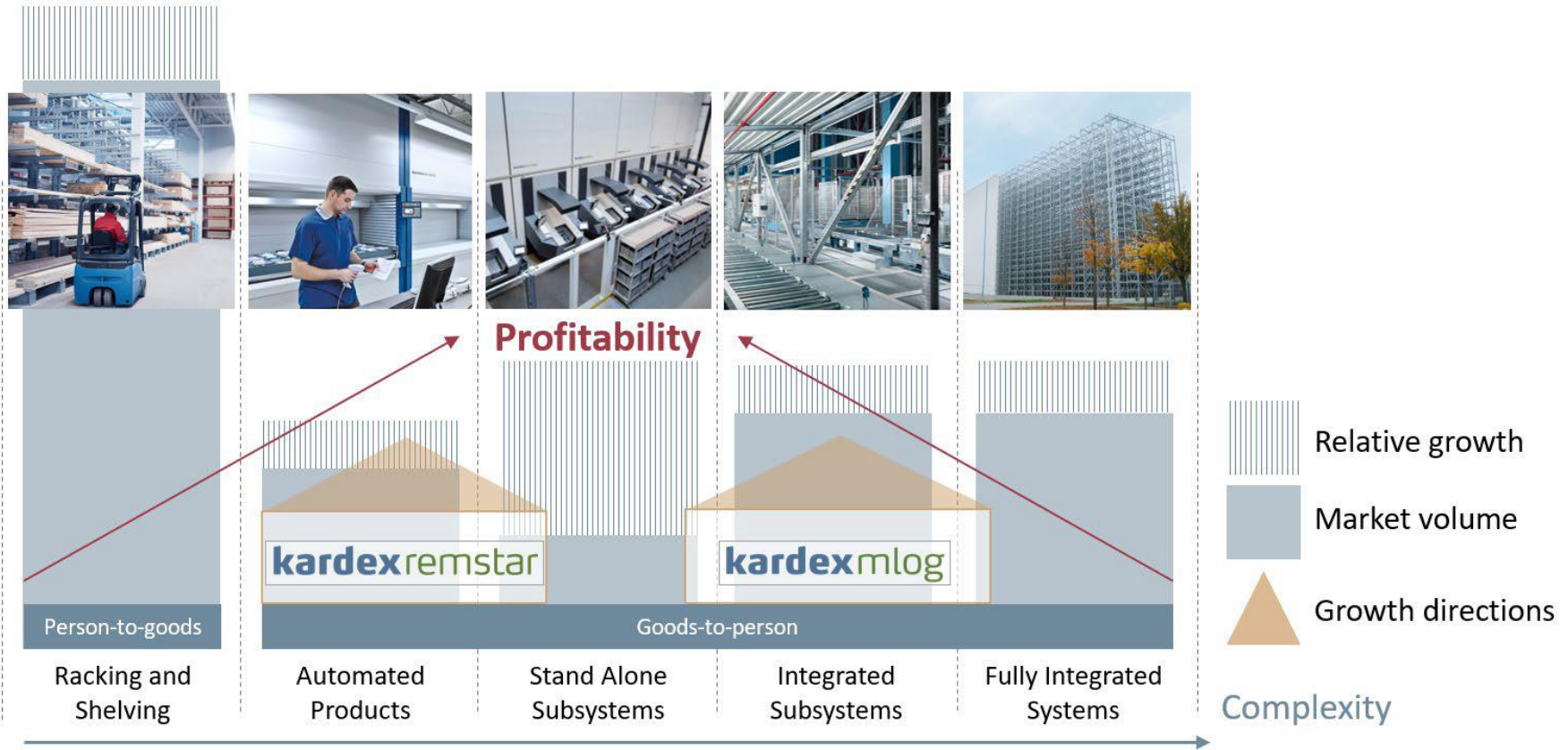
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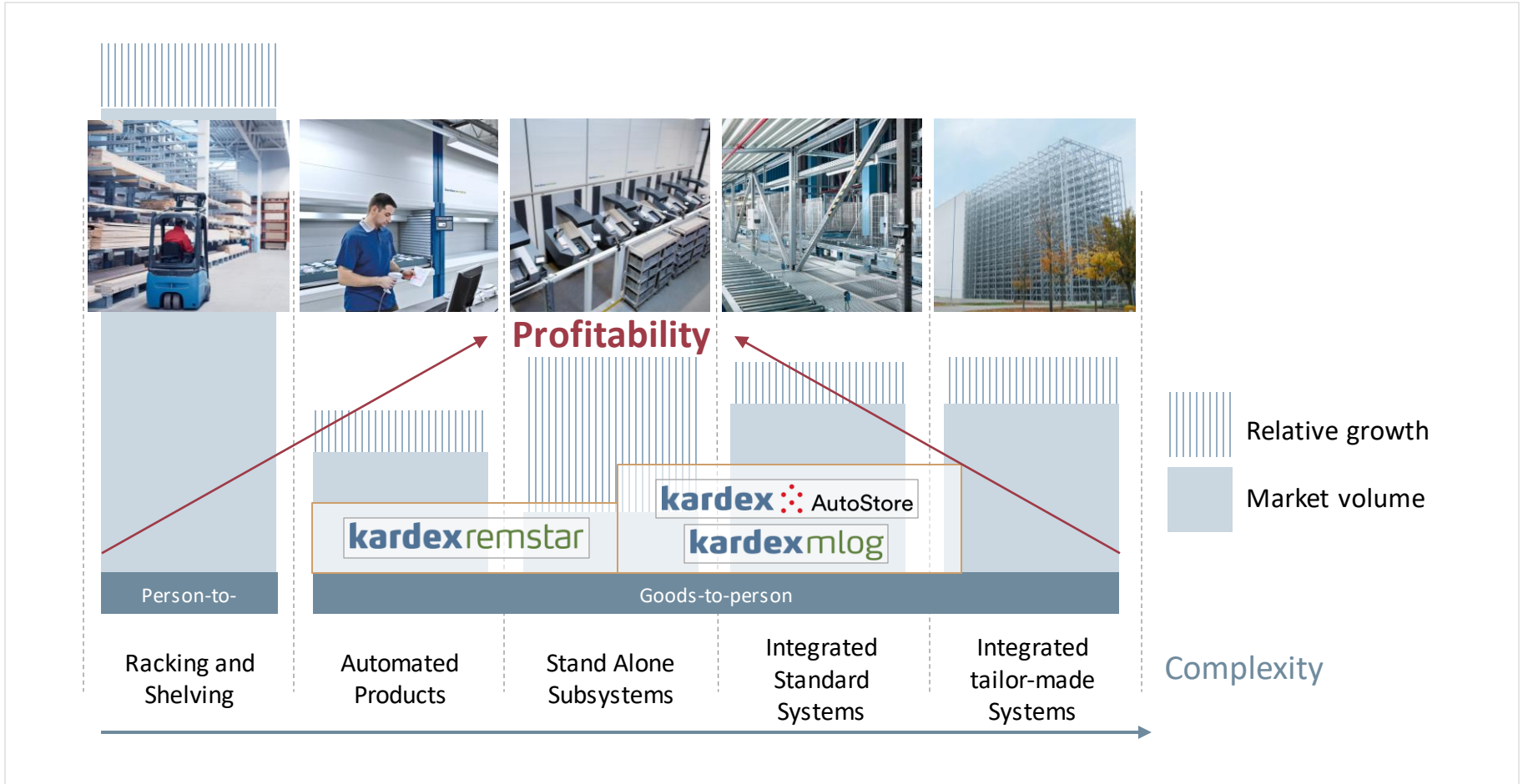
AutoStore

ROCKET SOLUTION

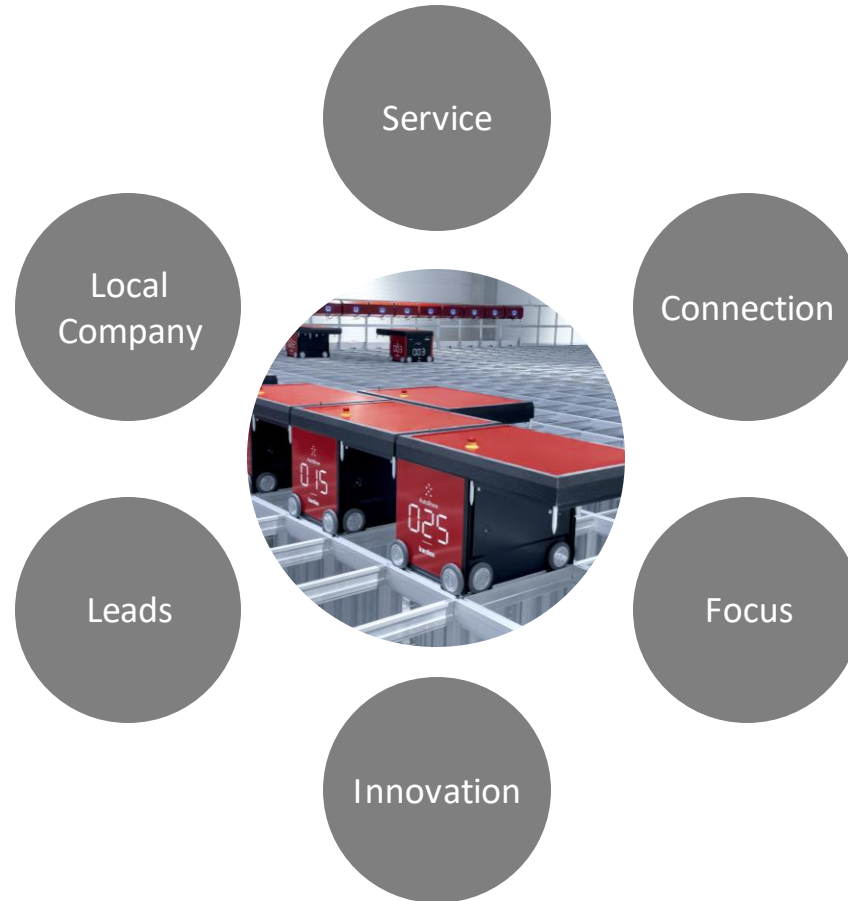
Kardex in the Intralogistics Market – 3 Years ago



Kardex in the Intralogistics Market – Now



AutoStore Business – Blueprint for Kardex?



Kardex global setup: A look into the future



Thank you!

Dr. Jens Hardenacke

CEO

Outlook *(as communicated 27 July 2023)*

- Near shoring and skilled labor force shortages continue to strengthen the global megatrend towards automation of intralogistics solutions supporting Kardex' business model
- Customers expected to continue investments in intralogistics solutions to maintain or strengthen competitiveness, despite worldwide cooling of growth expectations
- Strong Backlog of both Remstar and Mlog is a solid foundation for the second half of the year
- Availability of components improves but remains fragile
- Kardex AutoStore to continue contributing to volume increase and profitability
- Kardex is well positioned to develop in line with the communicated financial targets

Disclaimer

This communication contains statements that constitute “forward-looking statements”. In this communication, such forward-looking statements may include statements on the financial situation, earnings situation and business results of Kardex as well as certain strategic plans and objectives. Because these forward-looking statements are subject to risks and uncertainties, actual future results may differ materially from those expressed in or implied by the statements. Many of these risks and uncertainties relate to factors which are beyond Kardex’ ability to control or estimate precisely, such as future market conditions, currency fluctuations, the behavior of other market participants, the actions of governmental regulators and other risk factors detailed in Kardex’ past and future filings and reports and in past and future filings, press releases, reports and other information posted on Kardex’ websites. Readers are cautioned not to put undue reliance on forward-looking statements, which speak only of the date of this communication. Kardex disclaims any intention or obligation to update and revise any forward-looking statements, whether as a result of new information, future events or otherwise.