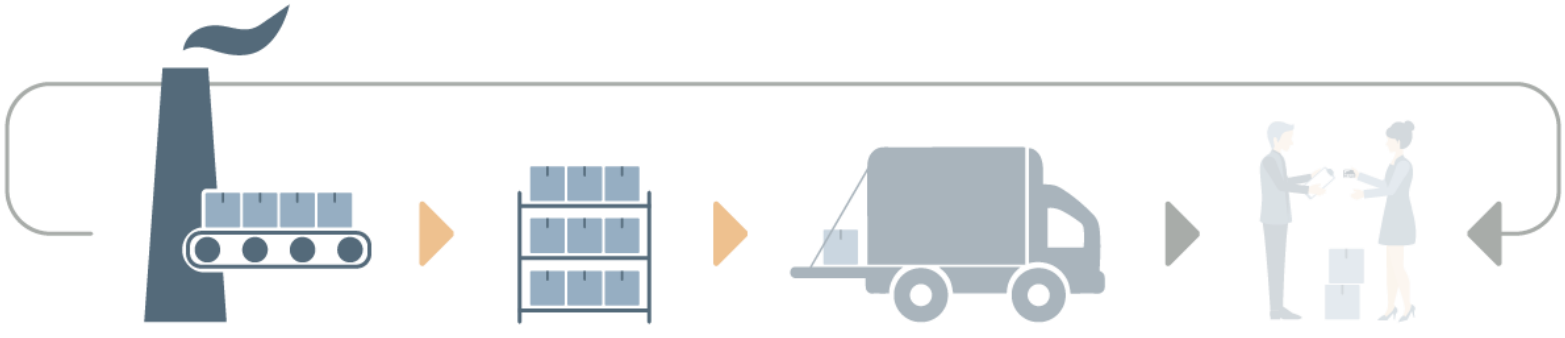


Corporate Technology

Capital Market Day, Nov 23rd, 2021 – Dr. Volker Jungbluth

kardex

Market in brief – Definition of Intralogistics



- Intralogistics optimizes the efficiency of supply chains within the boundaries of a manufacturing and/or distribution center
- Intralogistics solutions provider offer a range from purely manual to highly automated solutions
- Over the past decade the Intralogistics definition has been extended to partially cover the B2C interface (last mile)
- Within the extended Intralogistics Market, Kardex focuses on Automated Material Handling Solutions for items, bins and pallets

Kardex in brief – Positioning of Divisions to drive Profitable Growth



Profitability

kardexremstar

kardexmlog

Person-to-goods

Goods-to-person

Racking and Shelving

Automated Products

Stand Alone Subsystems

Integrated Subsystems

Fully Integrated Systems

Complexity

Relative growth

Market volume

Growth directions

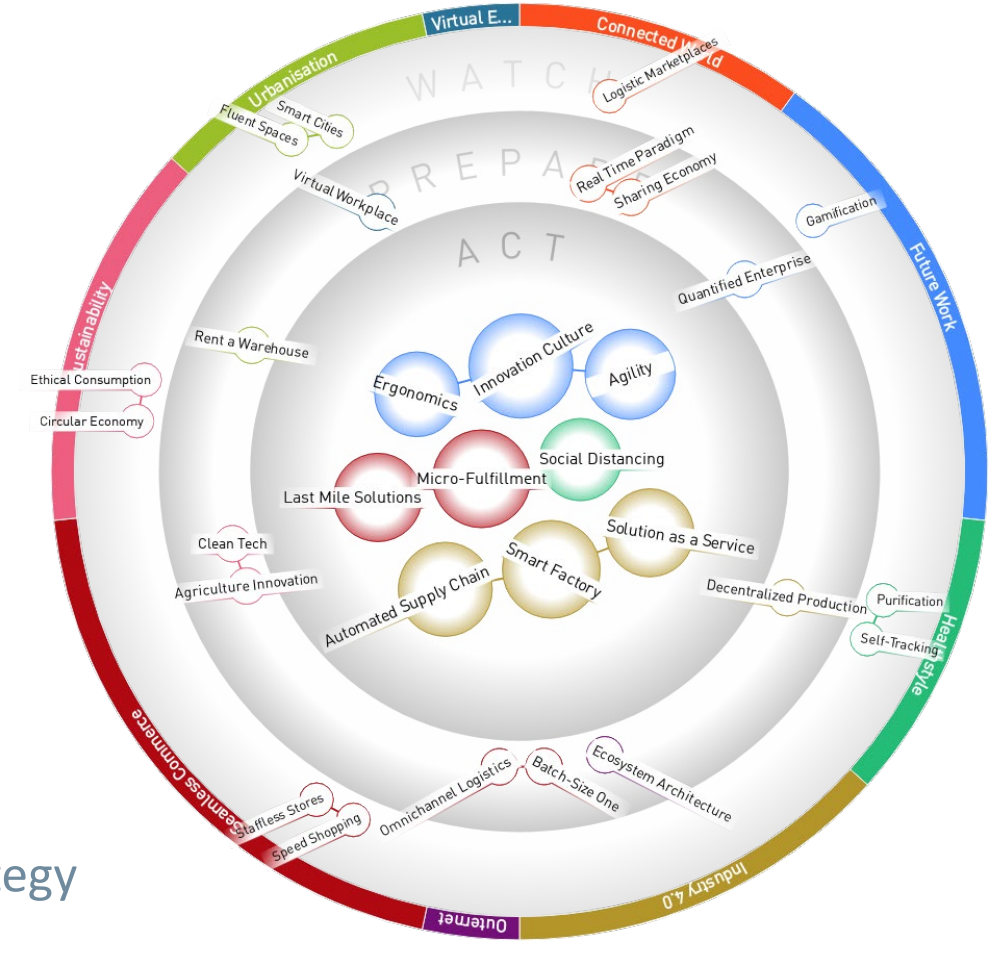
Impact of Social and Business Trends on Intralogistics/Kardex

Mega Trends

Connected World	Future Work	Healthstyle
Industry 4.0	Outernet	Seamless Commerce
Sustainability	Urbanisation	Virtual Experience

Macro Trends (to act on)

Agility	Innovation Culture	Ergonomics
Last Mile Solutions	Micro-Fulfillment	Social Distancing
Automated Supply Chain	Smart Factory	Solution as a Service



Input for Kardex Strategy

Impact of Technology Trends on Intralogistics/Kardex

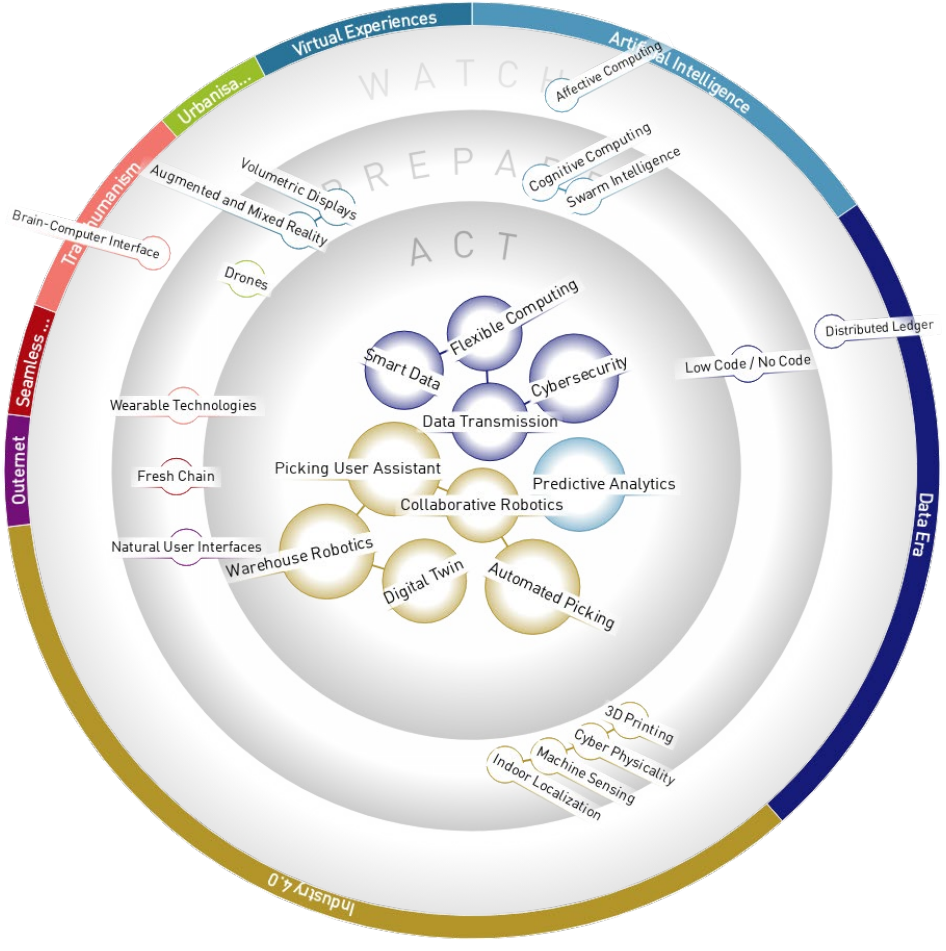
Mega Trends

Artificial Intelligence	Data Era	Industry 4.0
Outernet	Seamless Commerce	Trans-humanism
Urbanisation	Virtual Experiences	

Act Trends

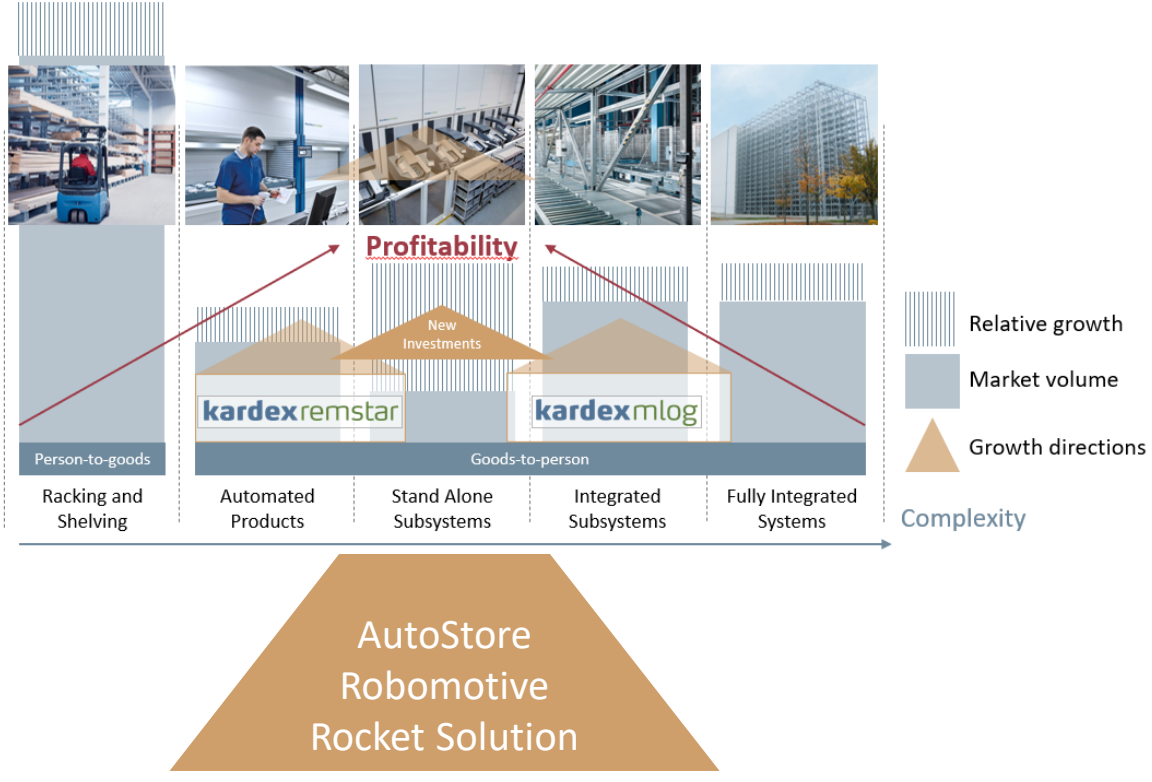
Data Transmission	Cybersecurity	Flexible Computing
Smart Data	Picking User Assistant	Collaborative Robotics
Warehouse Robotics	Digital Twin	Automated Picking
Predictive Analytics		

Input R&D and M&A activities



Industrial Logic and Motivation for Kardex to invest

Positioning to drive Profitable Growth

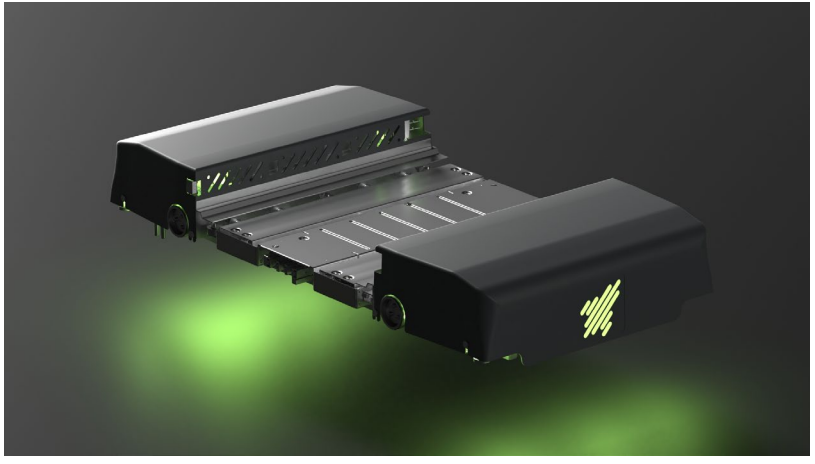


Main criteria

- Existing market leading technology
- Innovative technology with potential to become market leading technology
- Market success independent from Kardex
- Portfolio extension enhancing Kardex business
- Cross selling opportunities with Kardex Remstar and Mlog
- Good potential for Life Cycle Service business

Rocket Solution

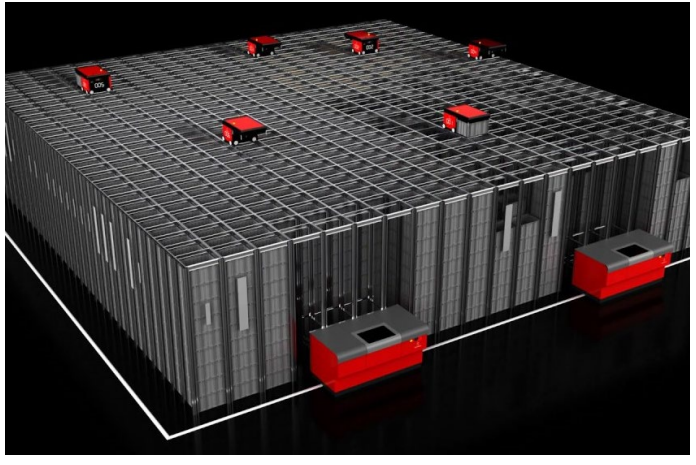
- Rocket Solution offers innovative technology for compact warehouse solutions
- Portfolio represents the 4th generation of mini shuttle technology
- Market demand for high dynamic mini shuttle solutions growing
- Opportunity to benefit from growth in E-commerce and particularly from E-Grocery (Micro Fulfillment Centers)
- Status of implementation:
  - Rocket shares acquired by Kardex in Q1/2020
  - Market launch in Q1/2021
  - Integrator/Partner network growing
  - Sales funnel increasing
  - First projects won





AutoStore

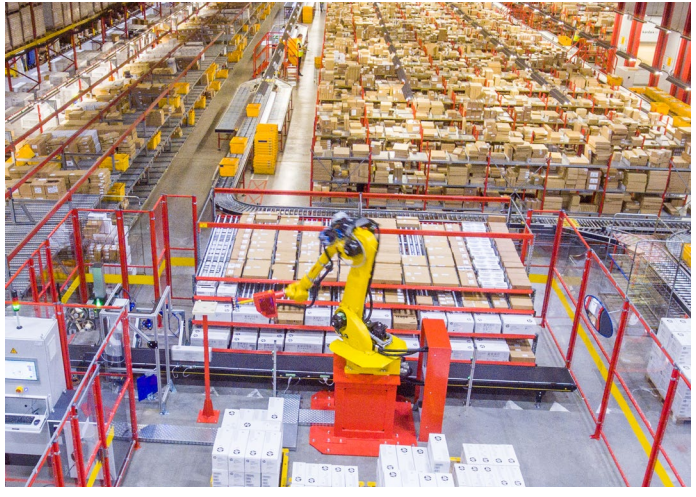
- AutoStore offers a well established, innovative compact warehouse solution
- AutoStore known as reliable, high-quality partner – matches Kardex requirements
- Market demand for AutoStore solutions growing
- Opportunity to benefit from growth in E-commerce and particularly from E-Grocery (Microfulfillment Centers)
- AutoStore technology supports in closing gaps in existing Kardex portfolio
- Status of implementation:
  - Partner Agreement with AutoStore signed in Q1/2021
  - Phase 1 organizational setup completed
  - Sales funnel increasing
  - First projects won

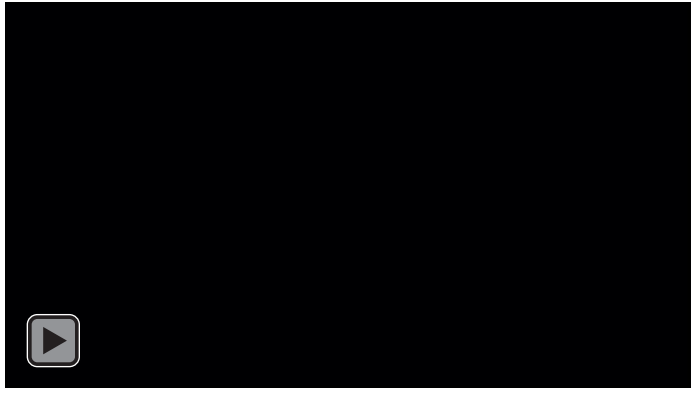




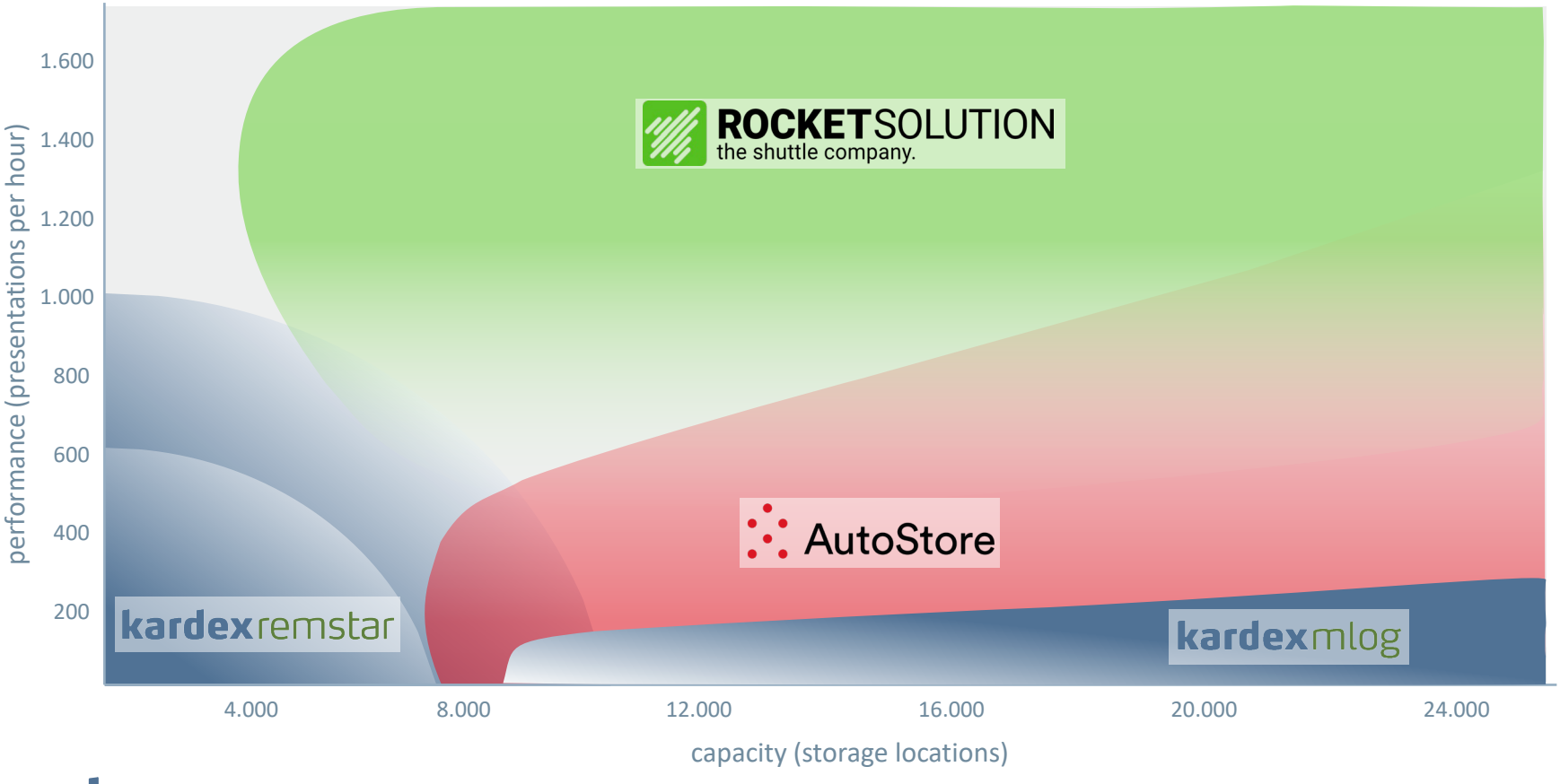
Robomotive

- Robomotive adds eye-hand coordination to robotic solutions to achieve human like behavior based on a self developed modular vision software
- Proven technology for high performance, reliable, maintainable and serviceable robot operations
- Solutions include robotic applications for single item handling, full case handling and depalletizing/palletizing
- Market demand for robotic solutions growing
- Robomotive technology complements Kardex legacy technology well
- Status of implementation:
  - Robomotive shares acquired by Kardex in Q2/2020
  - Integrator/Partner network growing
  - Sales funnel increasing
  - Joint standardization efforts with Kardex started





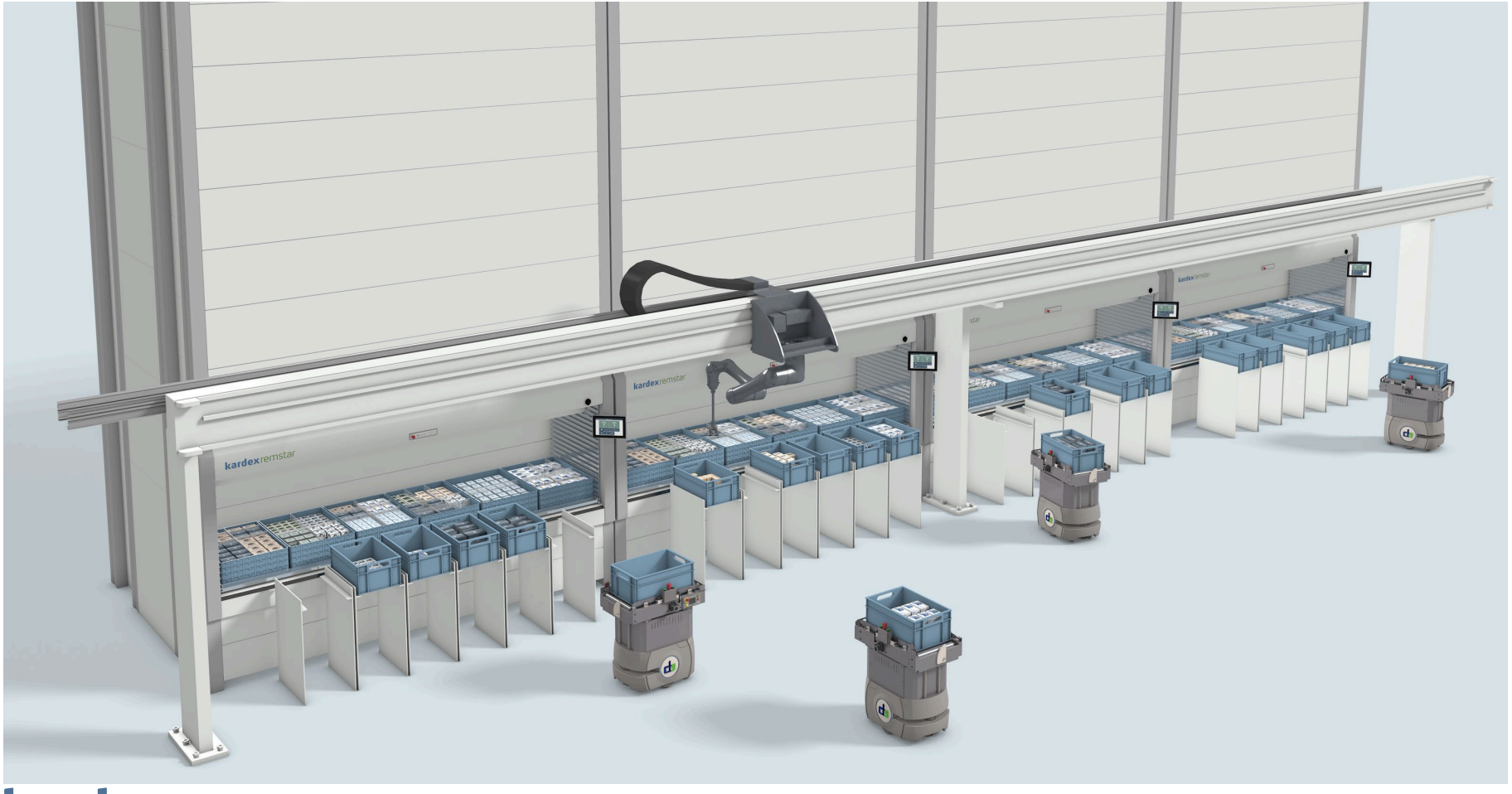
Kardex Positioning in Light Goods Logistics



AutoStore meets Robomotive



Kardex Remstar meets Robomotive



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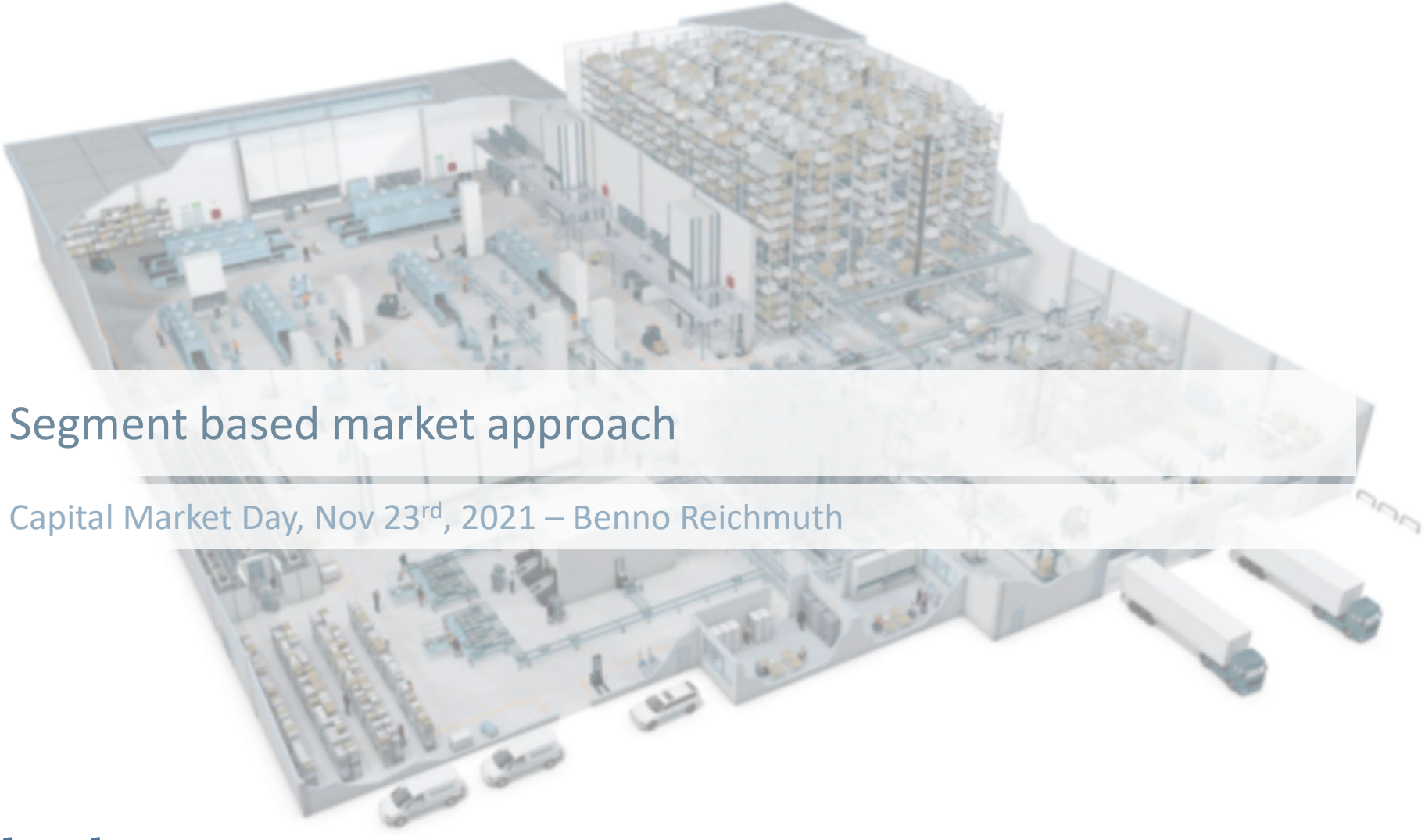

Segment based market approach

Capital Market Day, Nov 23rd, 2021 – Benno Reichmuth

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Kardex Remstar Industry Segment Development

KR Industry Segment	2019	2020	2021	Outlook
Wholesale / Retail / E-commerce	15%	17%	20%	↗
Mechanical Engineering	16%	14%	12%	→
Electronics	9%	12%	12%	↗
Metals	11%	8%	9%	↘
Healthcare / Hospitals	6%	9%	9%	↗
Automotive / Transportation Equipment	12%	7%	8%	→
Consumer Goods	5%	5%	6%	→
Public Administration / Government	6%	8%	4%	↗
3PL / Transportation	3%	3%	4%	↗
Chemicals	3%	3%	3%	→
Others	14%	14%	13%	↓

Kardex Remstar Target Segments Kardex Remstar Traditional Segments

Source: 2017-YTD 2021 KR Salesforce based on volume

Traditional Segments

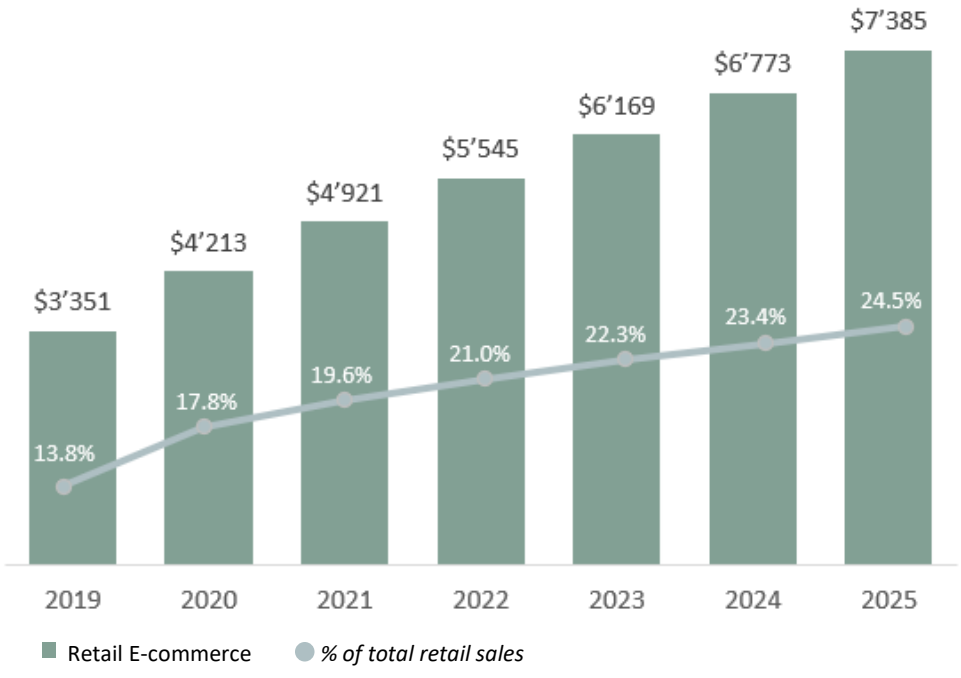
- Maintain the strong position in traditional industry segments

Target Segments

- Strong growth in additional target industry segments

Shift to Online Sales imposes change on Distribution Networks

Retail E-commerce Sales Worldwide, 2019-2025



- E-commerce is growing very fast, Covid19 is an accelerant
- Change in customer behaviour forces retail networks to adapt distribution networks
- Intralogistics automation is one of the "go to" answers
- Kardex Remstar targets small and medium sized operations
- Kardex Remstar provides a scalable solution “platform” which allows on demand extensions

Source: eMarketer, 2020/2021
Billions $

Selection of customers in Wholesale / Retail / E-commerce



FORS

BONVER LOGISTICS

med24.dk

COFARES

mobilezone

MOUSER ELECTRONICS

Sheffield GROUP

EM

SABAG

Trisa ELECTRONICS

METRO SUPPLY CHAIN GROUP

dosfarma

Meine ESA+ Zusammen sind wir stark

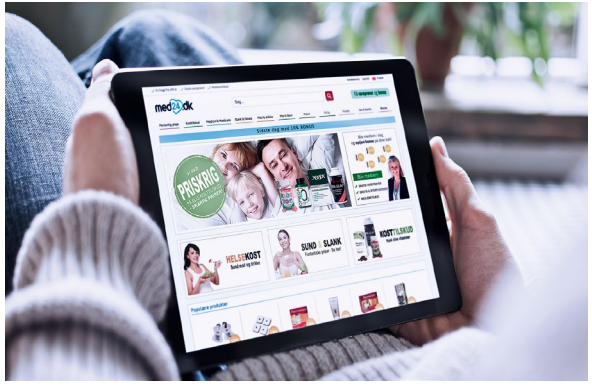
Prime Cargo

mk dichtungs ag

Order Fulfillment solution for E-commerce







Customer Med24

- Danish E-commerce company
  - Brand promise: low prices, fast delivery and the largest choice of products in the Nordics
  - Growing 400 % in 3 years
  - 50 employees
- Challenges/Pains:
  - Manual operated Warehouse became too small to store, pick and pack efficiently

Solution

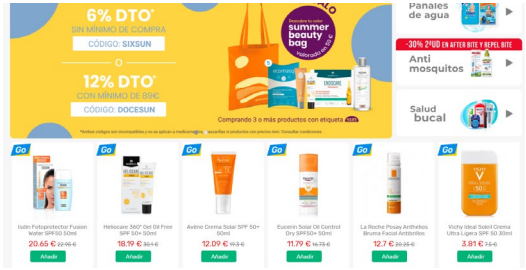
- Order fulfillment solution with the following components:
  - 9 x VCM RS 350
  - Color Pick System with trolleys
  - Power Pick Global
  - Since initial phase of 6 units customer has made 3 additional investments into this solution
  - Next planned expansion in 2022

Benefits

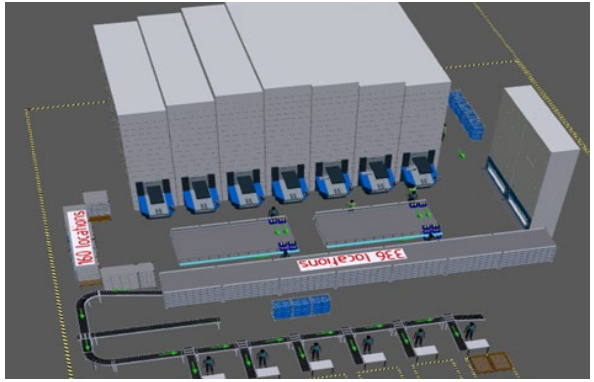
- Scalable solution ready for future growth
- Main gains:
  - Increased order picking performance
  - Minimized picking space
  - Picking staff reduced by 50 %
  - Increased operational transparency

Order Fulfillment Solution for Pharma Distributor

dosfarma







Customer Dosfarma

- Spanish Pharma distributor
  - Pure B2C distributor
  - Strong growth rates
  - No 3 in the Spanish market after Mifarma and Profarma
- Challenges/Pains:
  - Struggling with manual operation
  - Peak volume leads to inefficiency

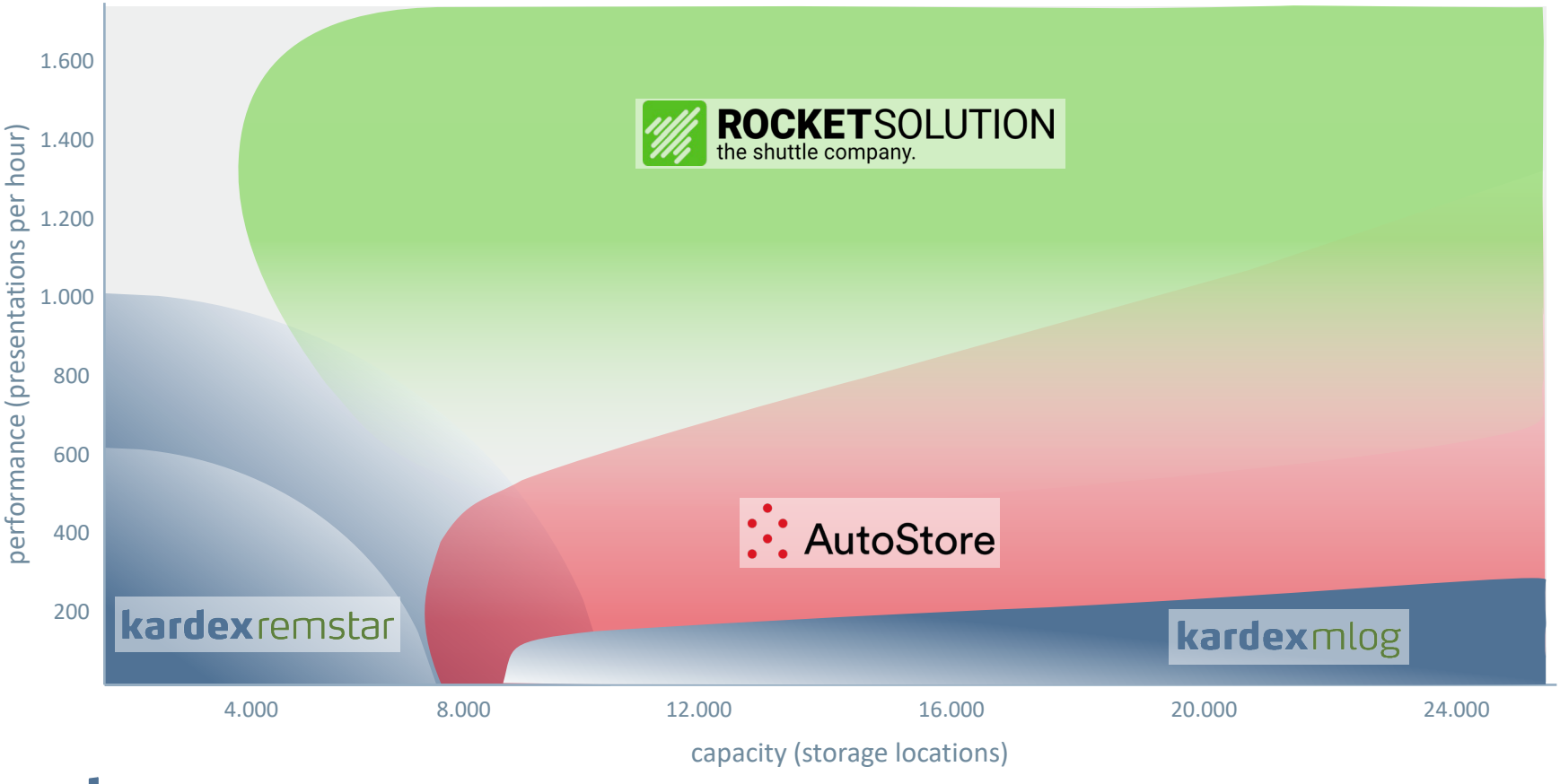
Solution

- Order Fulfillment Solution for slow, medium and fast movers with:
  - 3 x VBM LR 35
  - 2 x VCM RS 350
  - Pick Wall
  - Batching Table
  - Storage Preparation Trolleys
  - Power Pick Global Adaptions
  - Bins

Benefits

- Scalable solution ready for the next expansions
- Main gains:
  - Flexible solution to handle peak demands and fluctuations
  - Increased logistics productivity
  - Increased operational transparency

Kardex Positioning in Light Goods Logistics



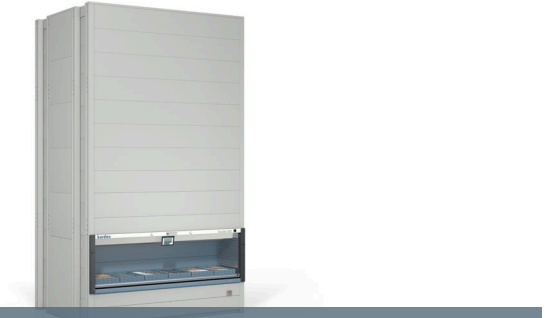
Division Kardex Remstar – Development Roadmap 2021 - 2023



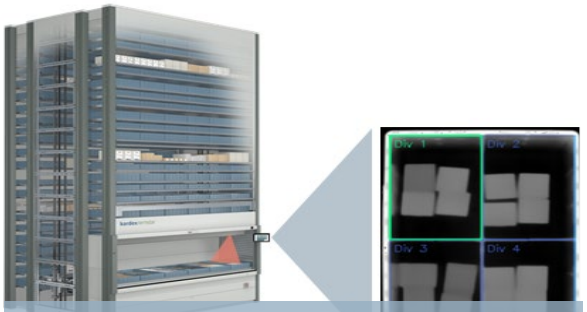
Robotic Solutions



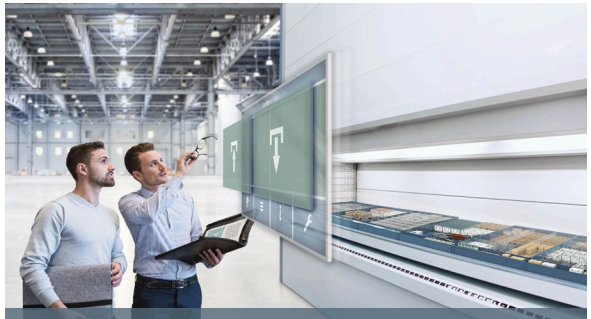
New VBM Model



VLM Facelift



Picking user assistance



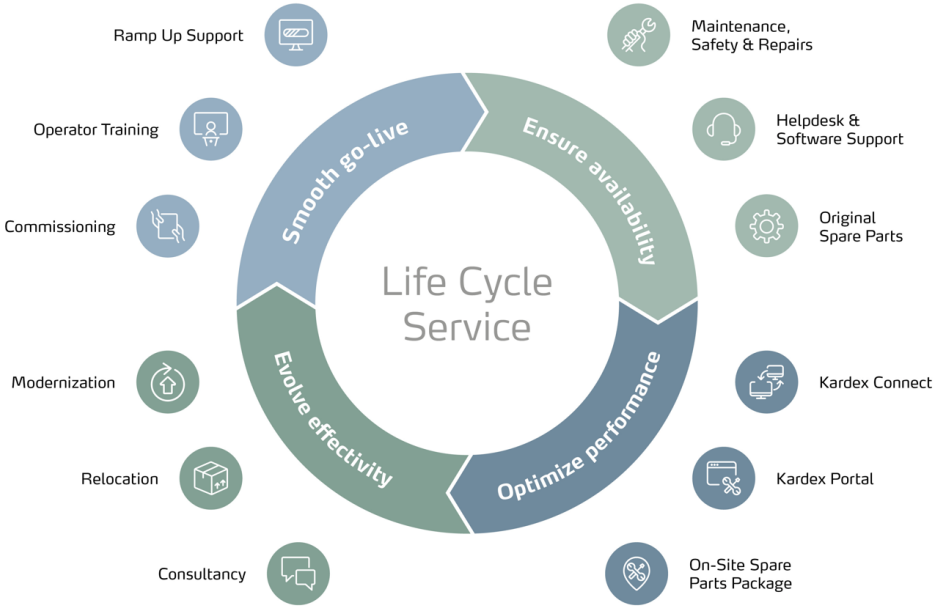
Power Pick Web 5.0



New Workstations

Industry 4.0 and IoT are always part of facelifts & new developments

Kardex Remstar Life Cycle Offerings



- Life Cycle Services provide a strong backbone for the entire business model
- More than 140.000 Kardex Remstar machines installed
- 15.000 Software installations
- Digital platform with > 500 customers connected
- >20 local expert helpdesks
- 20+ languages supported
- Installed base provides a lot of potential for repeat business

Summary

- With targeted investments, Kardex Remstar strives to maintain its strong position in the traditional Industry Segments
- The shift from traditional to online retail sales drives the demand in (semi and fully) automated order fulfillment solutions
- To leverage this potential, Kardex Remstar focuses on selected industry segments or companies who operate in the E-commerce business or have an online sales channels
- Wholesale / Retail / E-commerce is targeted to contribute even stronger to Kardex Remstar's Net Revenue mix in future

Thank you



Company Presentation 2021

Capital Market Day, Nov 23rd, 2021 – Thomas Reist

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Sustainability @ Kardex

View on ESG







Environment

- Solutions from Kardex
  - Reduce energy consumption and footprint of our customers
  - Ensure ergonomic handling of goods
  - Are longtime investments
- Own Supply Chain complies with common standards
  - Energy management system (ISO 50001:2018)
  - Quality management system (ISO 9001:2000)

Social

- Corporate Culture
  - Guiding Principles including the Core Values (Respect, Team Spirit, Reliability and Passion)
  - Brand Promise
- Continuous People Development
  - Dual career model
  - Kardex Leadership Framework
  - Kardex Academy
  - Talent management
  - Global Culture Committee

Governance

- Kardex Code of Conduct
  - Applicable to all employees and business partners
  - Mandatory training / zero tolerance
  - Basis for open criticism / whistleblowing
- Best Practice Corporate Governance
- “one share - one vote” principle
- Attractive dividend policy
  - Pay-out of up to 75% of the operational Net profit

ESG Roadmap

- **2020**
  - First Sustainability Report published



- **2021**
  - Membership UN Global Compact
    Supporting 5 SDGs
  - Sustainability Report enhanced



- **2022**
  - Framework for sustainability strategy established
    First set of sustainability targets defined
  - Sustainability Reporting based on GRI
    no opting in

GRI

Outlook

Outlook 2021

- Efficiency in Intralogistics remains a key success factor for Kardex' customers
- Effects of and learnings from the pandemic will further increase the demand for automated solutions
- Kardex Remstar expected to turn strong order backlog into increased net revenues in H2 2021
- Kardex Mlog will profit from positive market conditions and strong order backlog
- Short-term concerns regarding the continued uncertainties in the market due to the pandemic and global supply chain topics ongoing
- Kardex will continue with strategic investments in supply chain, technology and digitalization
- New manufacturing site in the US started operation in October 2021 and will move Kardex Remstar closer to its customers

Updated Financial Targets

Updated Financial Targets

		New	Previous
Net Revenues Growth	Group	5 - 7% p.a.	4 - 5% p.a.
EBIT Margin	Kardex Remstar	14 - 17%	8 - 16%
	Kardex Mlog	5 - 8%	4 - 8%
	Group	10 - 14%	> 6%
ROCE	Group	> 20%	> 20%
Dividend Policy (payout ratio)	Group operational profit	up to 75%	up to 75%
Net Debt/EBITDA	Group	< 2.5x	< 2.5x

Investment Case – Why Kardex

Kardex Investment Case

- Intralogistics with robust and high global growth expectation above GDP
- Logistics cost as a major cost element for Kardex' customers lead to a constantly increasing acceptance of automation
- Installed base and Life Cycle Management as backbone for a sustainable Business Model
- High profitability of both Divisions as a result of their strong market positions
- Very solid balance sheet with no interest-bearing debt or goodwill
- Substantial free cash flow generation
- Attractive dividend policy
- Kardex' solutions and services support sustainability efforts of its customers
- Expansion of portfolio will contribute to Kardex image as total solution provider

Disclaimer

- This communication contains statements that constitute “forward-looking statements”. In this communication, such forward-looking statements include, without limitation, statements relating to our financial condition, results of operations and business and certain of our 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’s 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’s 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.

Thank you