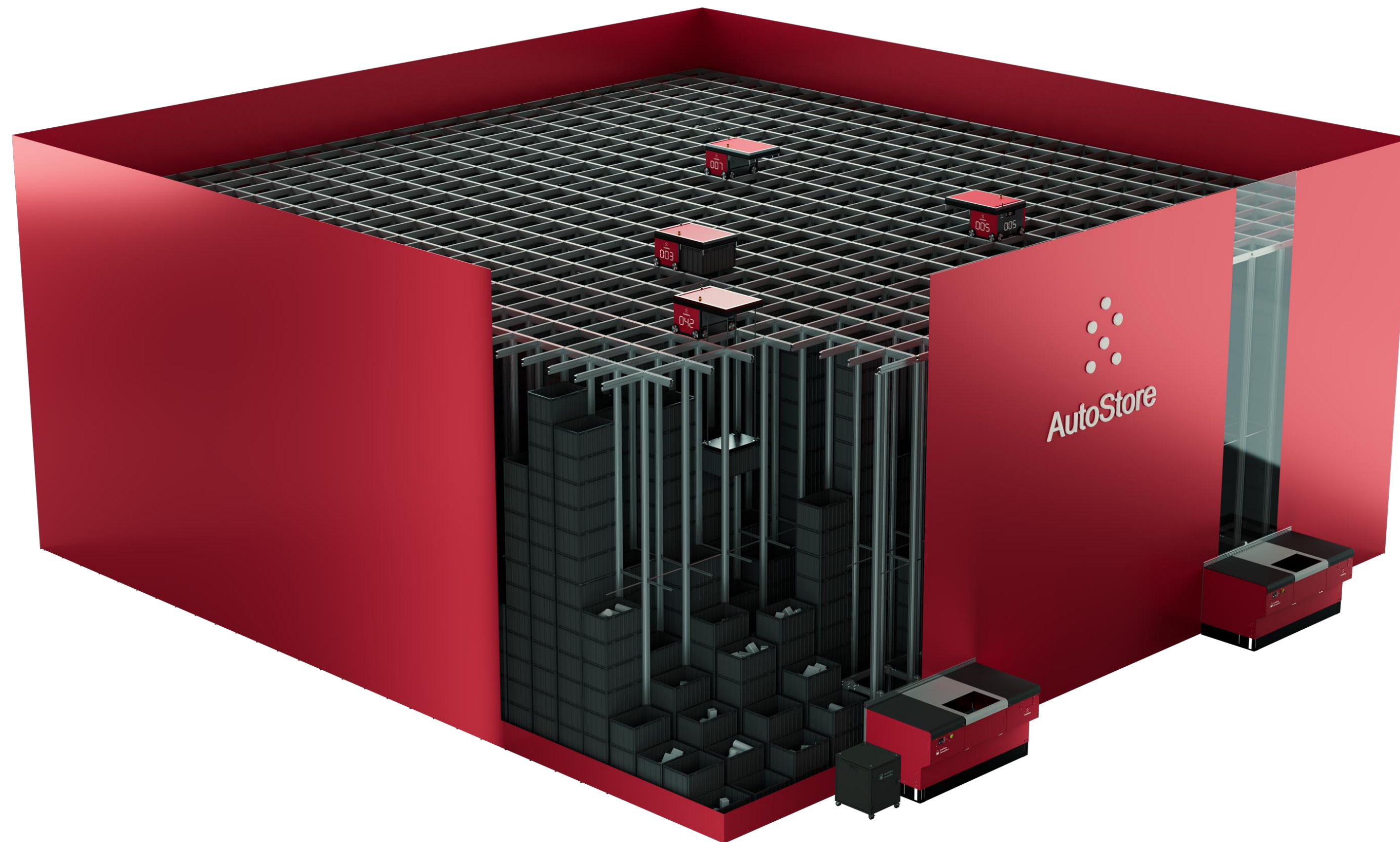![AutoStore]

A global robotics champion, powered by world class intelligent software

Five Standard Modules

01
Bins

02
Grid

03
Robots

04
Ports

05
Controller
(Software)

AutoStore

Software powered cubic storage solution offering unmatched customer value

Throughput	SKU Range	Capacity	Density	Scalability/ Modularity	Reliability	Reliability
Up to	Up to					
650	**90**%	**1** million+	**90**%+	**Modular**	**99.9**%	**99.7**%
Picks per hour (addressing ~90% of the market)[1]	of products sold online[1]	Max. # of SKUs[2]	Space utilisation	Applicable to any warehouse layout	Picking accuracy	Uptime
↓	↓	↓	↓	↓	↓	↓
Superior efficiency/ cost proposition	Unconstrained expansion	Infinitely adaptable	Cost reduction	Agile response to growth	High end-customer satisfaction	Reliability for mission critical operations and inventory access

Value proposition to customers
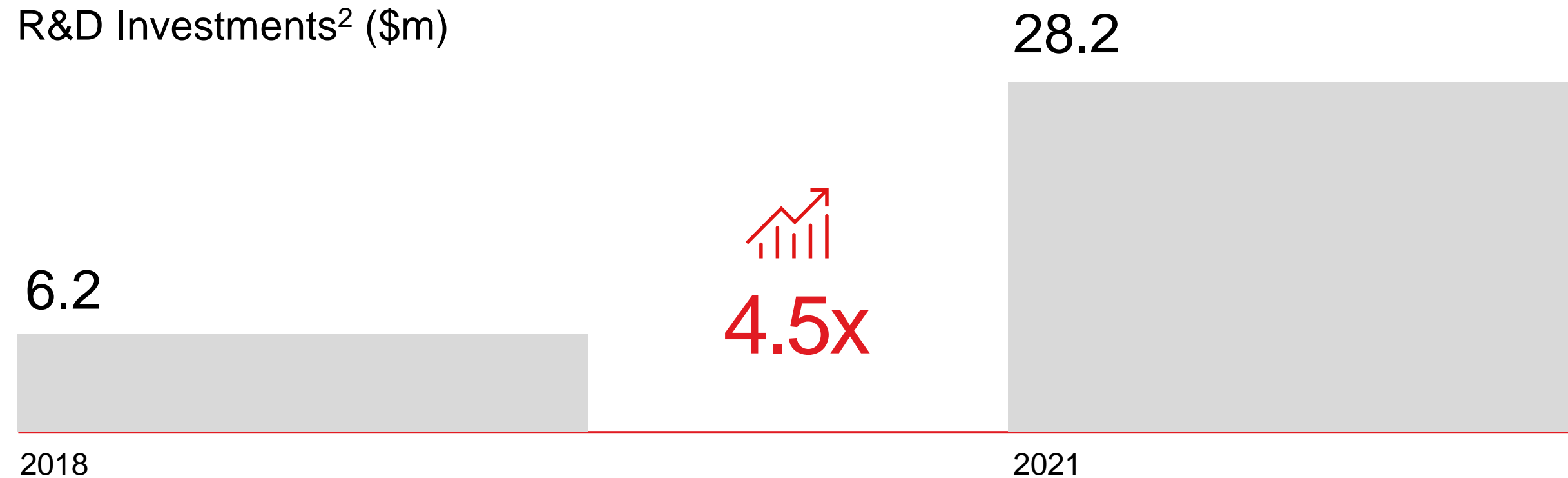
Innovation engrained in AutoStore's DNA

Growing organization with the right capabilities

Total R&D employees

49

2018

3.3x

~70% of R&D FTEs in software

~160

April/May 2022

R&D Investments[2] ($m)

28.2

4.5x

6.2

2018

2021

Key R&D focus areas to expand TAM[1]

Warehousing

Retail

eCommerce
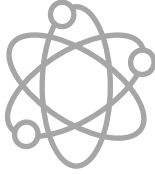
Grocery

Innovation Hub
the groundbreaking
laboratory

→ The space to test new and disruptive solutions

→ Equipped with a state-of-the-art climate chamber as well as wireless sensors technology to constantly acquire data on all the modules and systems tested

→ Able to replicate any environment conditions we can find around the world, so we can serve more applications

Continuously expanding use-cases and improvements through updates and new product launches

Increase efficiency for the supply chain	Self-correct robot error situations without stopping the installation	Ticket-to-play in high-throughput and large systems segment **Enabled access to $230bn AS/RS TAM**		New software architecture	State-of-the-art cloud-based design tool	Next-generation warehouse management system	Upgrade high-volume selling products	Cost-efficient solution
Carousel Port 3.1 released	X-Handler AI software released	New robot for Black Line	HTP workstation for Black Line launched	AutoStore Router released	Cloud simulator released	Launched AutoStore WMS[1]/WCS[2]	Bin Lift 2.0 and Carousel Port 4.0 to be released	R5+ released
2016	**2017**	**2019**	**2019**	**2020**	**2021**	**2021**	**2021**	**2022**

…Further Enhanced By New Software and Support Breakthroughs as We Continue To Be the Leader In the Industry

Software is core to our value proposition

Recent vertical expansion into WMS/WCS

ERP system

Used across business
WMS[1] and WCS[2]

Warehouse Management System (WMS)

Warehouse Control System (WCS)

Used within warehouse
Physical material movers, equipment control, and modules

Equipment Controls (for each equipment)

Physical Materials Movers

Other System Components

Covered by AutoStore capabilities

AutoStore Capabilities

AutoStore
Wms

Currently present in WMS/WCS for grocery MFC, WMS/WCS offering to expand into all warehouse types and end-markets

AutoStore Router

Sources: Company information

Note:
1. WMS: Warehouse Management System
2. WCS: Warehouse Control System

AutoStore's core software products are powered through advanced analytics and continuously improved over many years, thanks to closed feedback loops

AutoStore Router for dynamic on-Grid traffic control

Calculates optimal route
for all robots every second

Max throughput
measured (bins/hr)

+40%	**4x**	**2x**	
Enabler for more competitive offering on all-range systems	Enabler for high-throughput applications	Enabler for MFC applications	

Enabler for system throughput
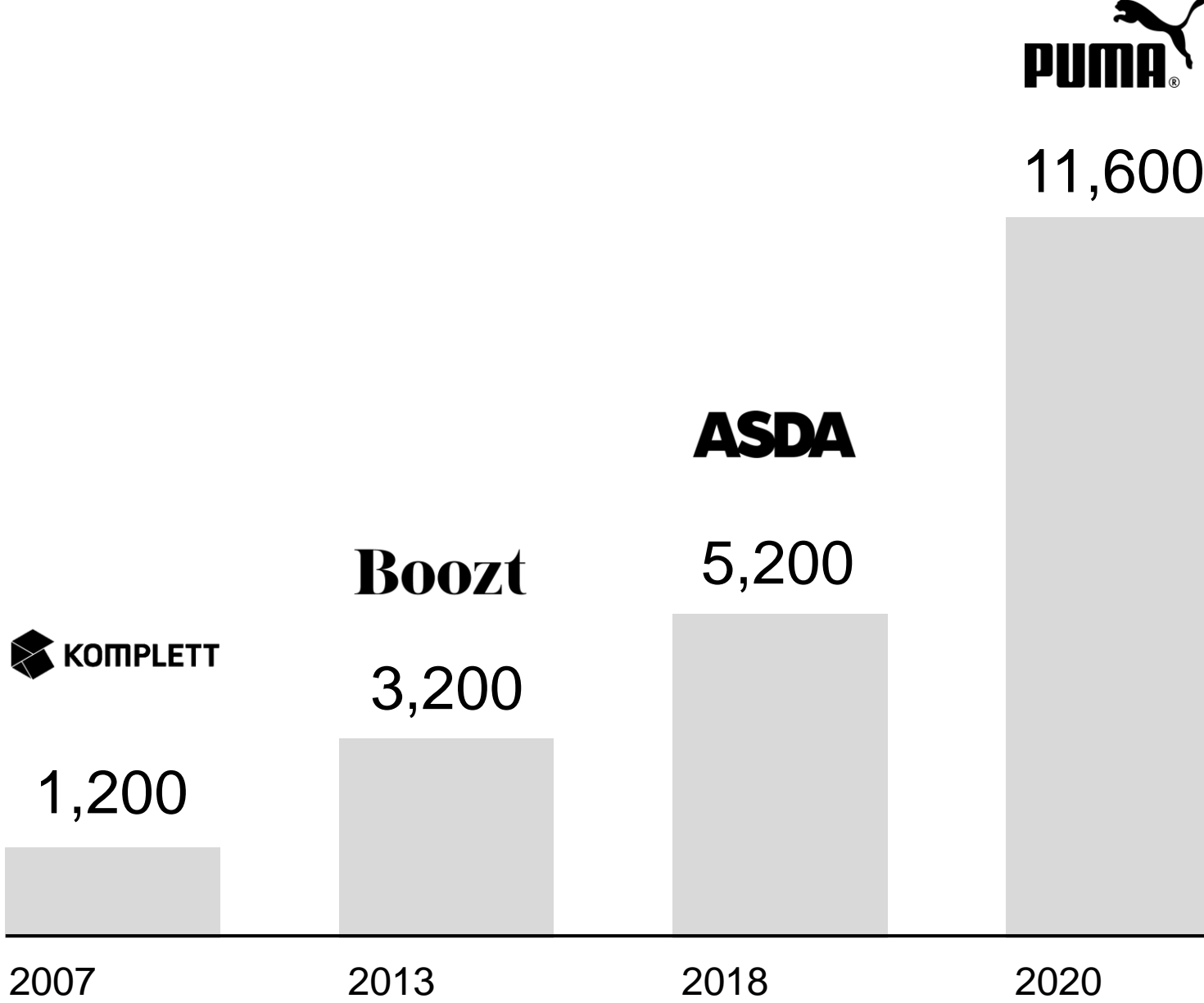
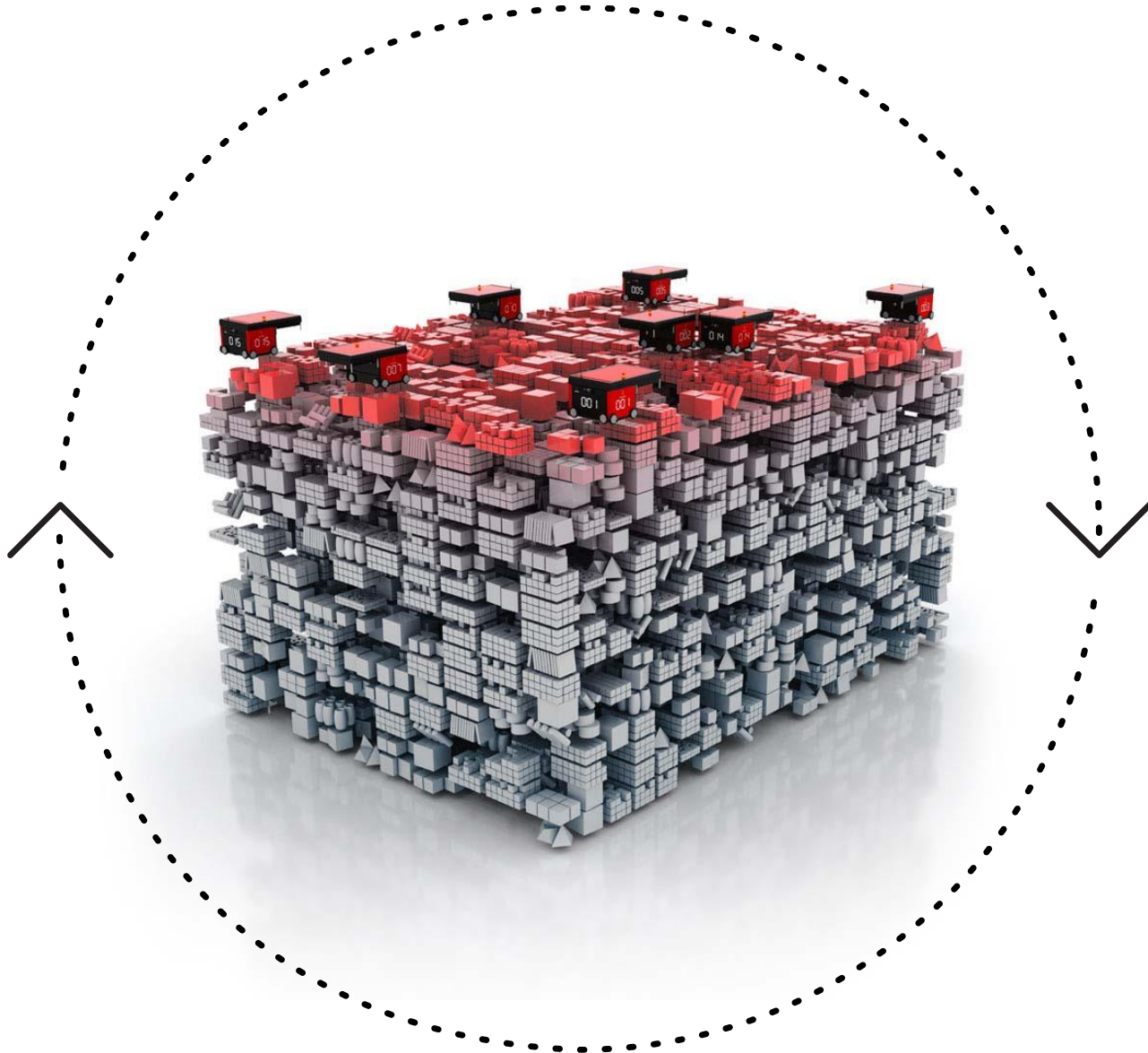Software optimization over time has led to improved system performance

AutoStore's core software products are powered through advanced analytics and continuously improved over many years, thanks to closed feedback loops

AutoStore X-Handler (exception handler)

Intelligent
Self-Diagnostic

Intelligent
Self-Correct

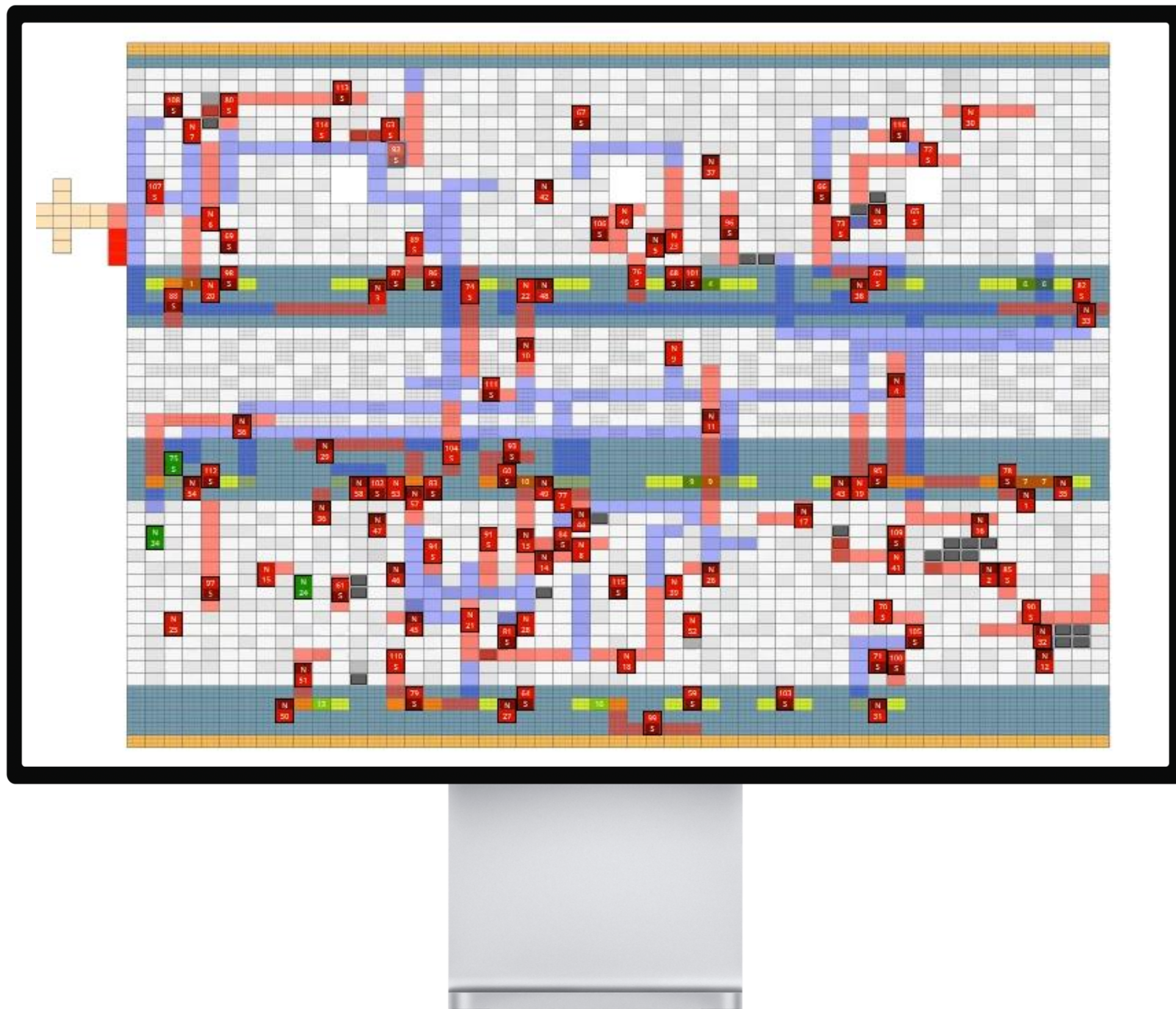**Enabler for system reliability**

Uptime
Worldwide

99.7%

Up to 50 onboard sensors
on each Robot

>98% of Robot errors are
automatically solved by software

Proprietary cloud-based software key enabler for our GTM strategy and growth

Tool to accurately dimension the system, verifying throughput rates

→ Determines the correct amount of Robots and Ports required to achieve the desired rate (bins/hour)

→ Activity-based system running on a set of rules specified by the user extracted from real customer data

→ Real-time solutions and capable of running options up to 10x the speed while running multiple scenarios in parallel

→ Partners verify simulations against real systems to demonstrate rate and work on future extensions

→ Automatic upload of sales opportunities and project data into our CRM providing full visibility into pipeline

# AutoStore value proposition recently expanded into WMS

Technology Stack

01 API architecture

02 Microservice architecture

03 Cloud-based multi-tenant

System capabilities

– Integrated product catalogue
– Inventory management control
– Receiving, put away and replenishment
– Intelligent Order Batching and Consolidation
– Pick and Pack
– Exception Handling
– Order Consolidation
– Delivery Scheduling
– Labor management/analytics
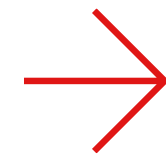
Customer benefits

– Maximum order picking efficiency
– Real time visibility into inventory status
– Improved replenishment
– Step-by-step verification of orders
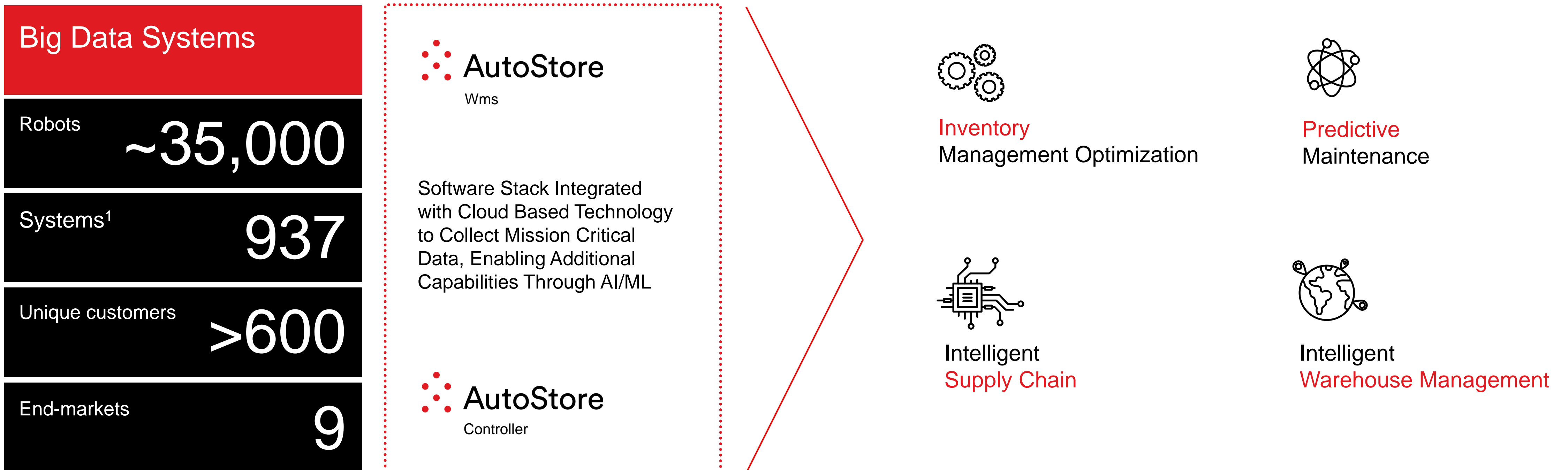– Smart substitution
– Optimized outbound logistics
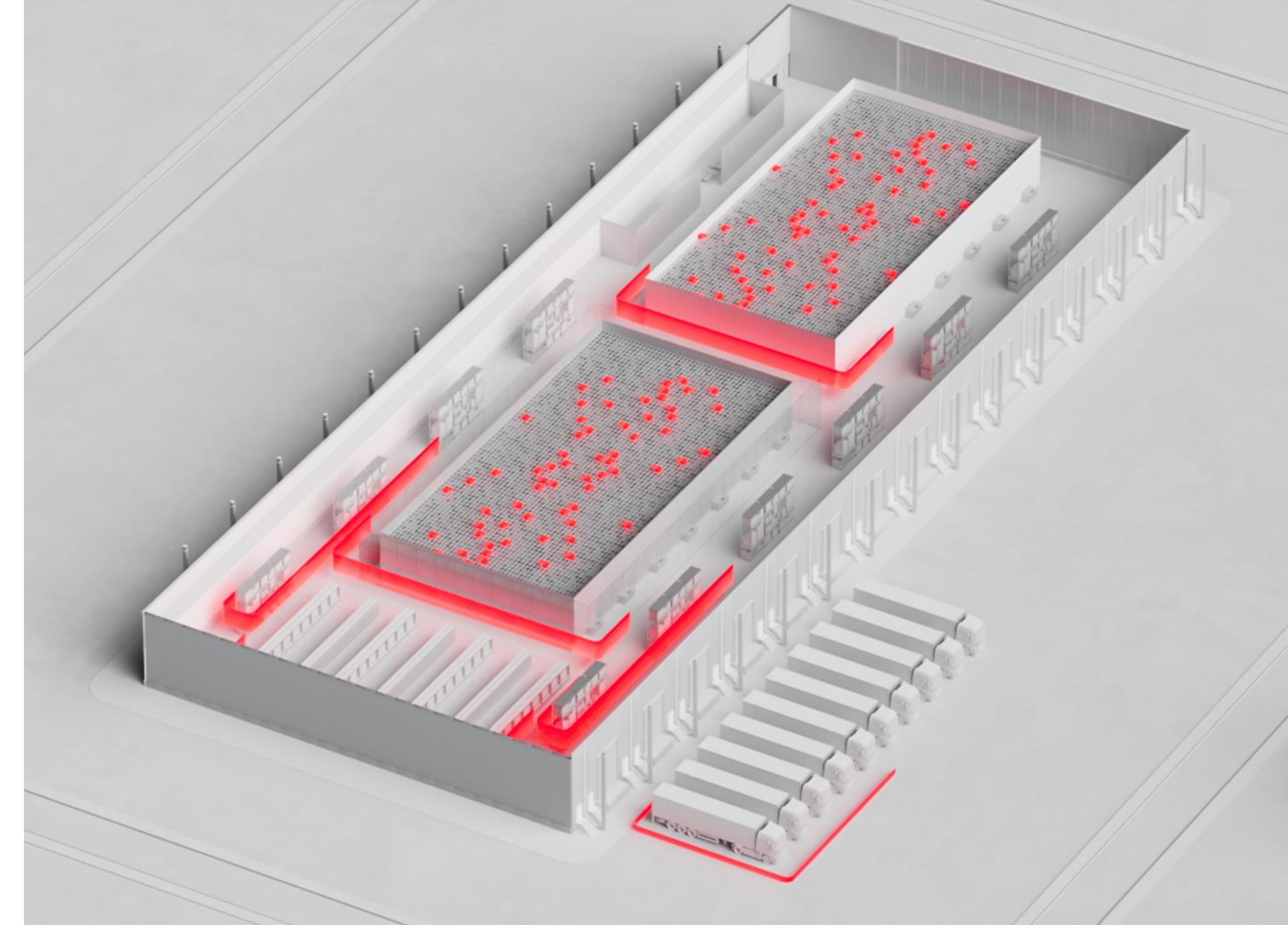
Agile and State-of-the-art WMS and WCS Solutions Create an Efficient, Modular and Easy to use Approach to Warehouse Management

Note:
1. WMS: Warehouse Management System

Data gathering combined with AI/ML capabilities to Further enhance competitive strength and customer value proposition

AutoStore's Future Solutions to Redefine Retail and Inventory Management

Big Data Systems	
Robots	~35,000
Systems[1]	937
Unique customers	>600
End-markets	9

AutoStore
Wms

Software Stack Integrated with Cloud Based Technology to Collect Mission Critical Data, Enabling Additional Capabilities Through AI/ML

AutoStore
Controller

Inventory Management Optimization

Predictive Maintenance

Intelligent Supply Chain

Intelligent Warehouse Management