

ACCELERATED DIGITALIZATION & AUTOMATION

DHL SUPPLY CHAIN

Dr. Paul Schlinkert
Mobile Robotics Summit
Düsseldorf October 2025





the world's leading logistic company

DHL Group is the
**largest logistics
company** globally

>600,000
employees worldwide

179
nationalities
of employees
in Germany



2 strong **brands**



Business in
>220 countries
and territories



>36.000 electric
vehicles worldwide

Nr.1 share of sustainable
aviation fuel (SAF) among all
airlines



Group Revenue
above EUR
84 billion*

Group EBIT
around EUR
5.9 billion*

Free Cashflow
around EUR
2.9 billion*

Target by 2030**:
Reducing GHG emissions
to **<29m** metric tons p.a.

* FY 2024

** subject to potential restatement due to methodology
updates or change in business scope, e.g., due to M&A

DHL is a global logistics provider with a number of core divisions offering a diverse portfolio of logistics services

Division

DHL Express



DHL Global Forwarding and Freight



DHL Supply Chain



DHL eCommerce



Post & Parcel Germany



Core competence

Global, urgent express shipments

Global market leader in Time Definite International (TDI)

International transportation

of Air Freight, Ocean Freight and Road Freight including Customs Clearance

Manage **supply chains** to reduce complexity for our customers. Our profitable core includes warehousing

Domestic **last mile parcel** delivery in selected countries outside of Germany (Europe, USA, India and selected Asian markets)

German parcel and mail incumbent with leading market Positions

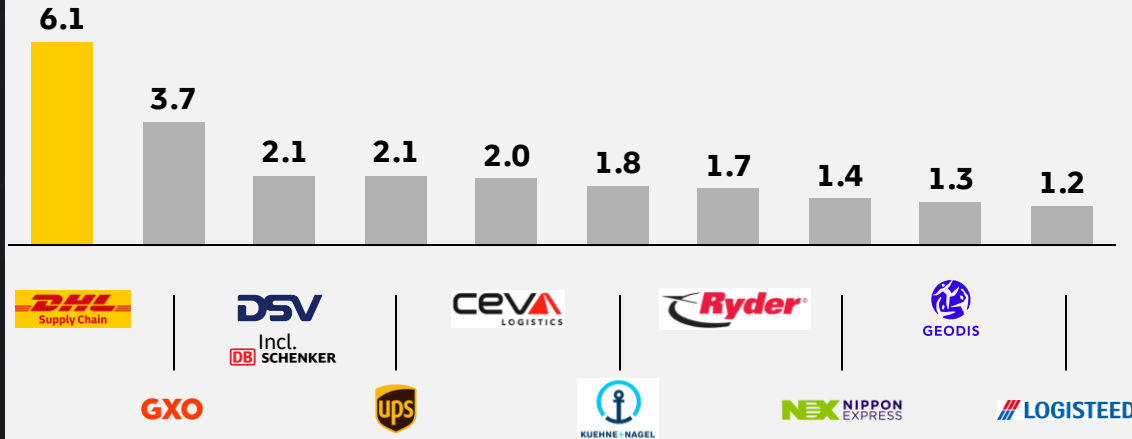
(like USPS for Germany but publicly listed)

DHL SUPPLY CHAIN IS THE UNDISPUTED MARKET LEADER

We have developed an extensive global network focused on innovation, maintaining a strong commitment to operational excellence to set ourselves apart from competition

Contract logistics players

Market shares in % based on 2024¹⁾



Market leader in Contract Logistics

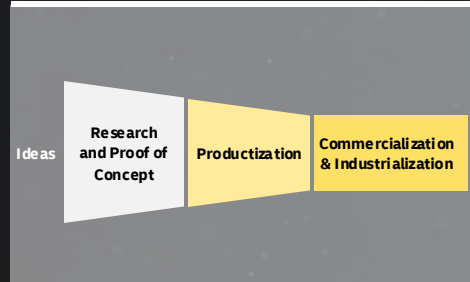
Only contract logistics provider certified as **“Great Place To Work”** with 100% country coverage

Leader recognized by **Gartner** in the Magic Quadrant for Third-Party Logistics, Worldwide (2025)

INNOVATION & ROBOTICS

Innovation reaches its full potential when implemented at scale

Technology selection



Focused **approach to identify, test and scale robotics technology**

Strategic partnerships with **tech start-ups and robotics leaders**

Integration & orchestration



Sophisticated IT architecture enables us to be best integrator of software, robotics & assets

Partnerships with strategic software vendors for standard integration of multiple robotics solutions within a site

True scalability

>7,500 robots live

92% operations with 1+ digitalization project live

~€1bn invested (2020-2024)



Assisted picking robots



Goods-to-person



Indoor robotic transport



(Un)loading robots



Artificial Intelligence



**Real innovation is
when you
implement at
large scale...**

...otherwise, it's
just **a nice idea.**



**Ever-increasing
customer expectations**



**Labor shortage and
retention**



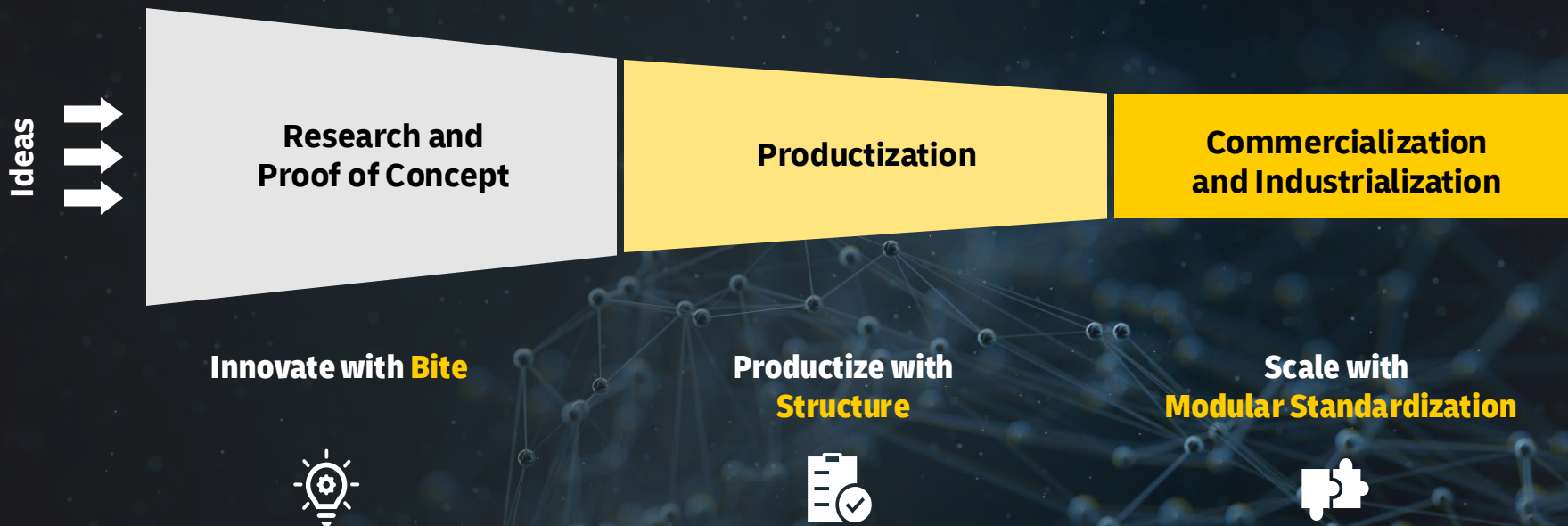
**Scarcity of warehouse
space**



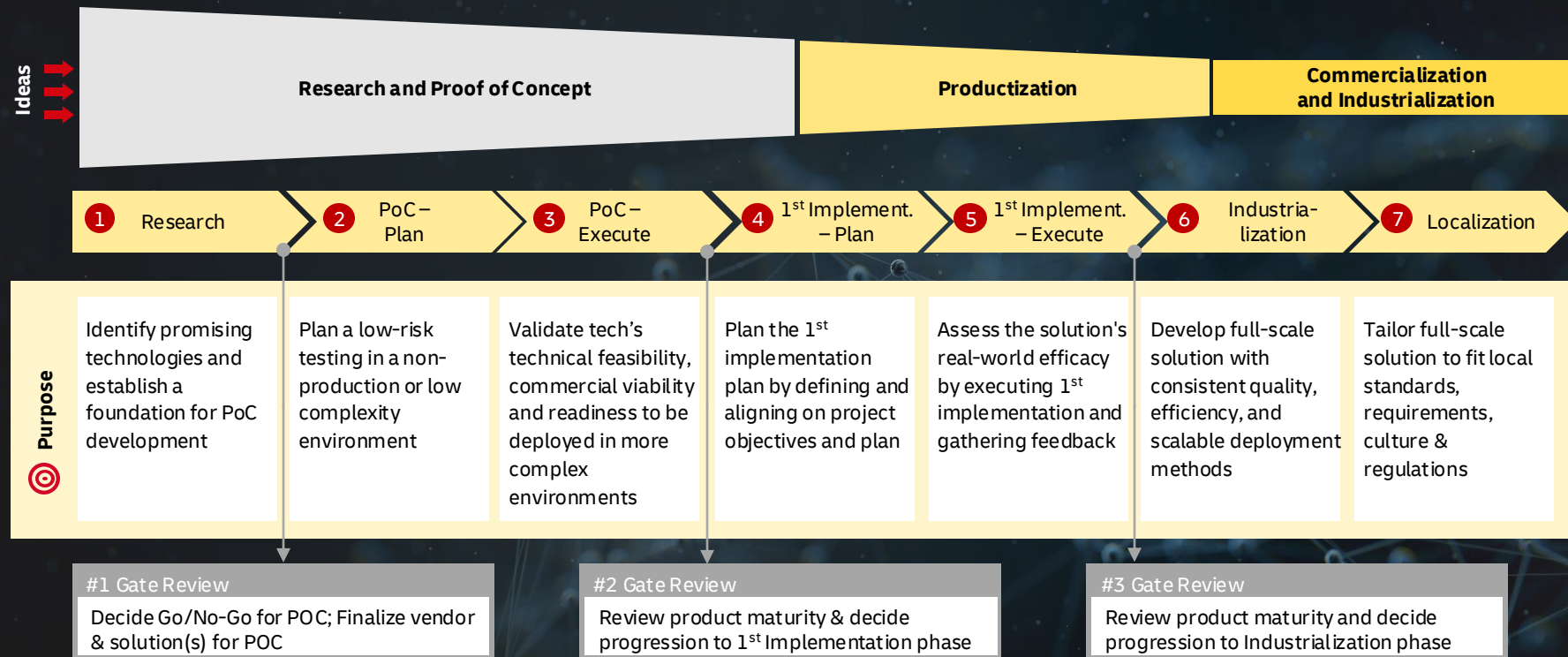
**Accelerating technology
pace**



Our Accelerated Digitalization and Automation journey started years ago, and it is far advanced and industry-leading



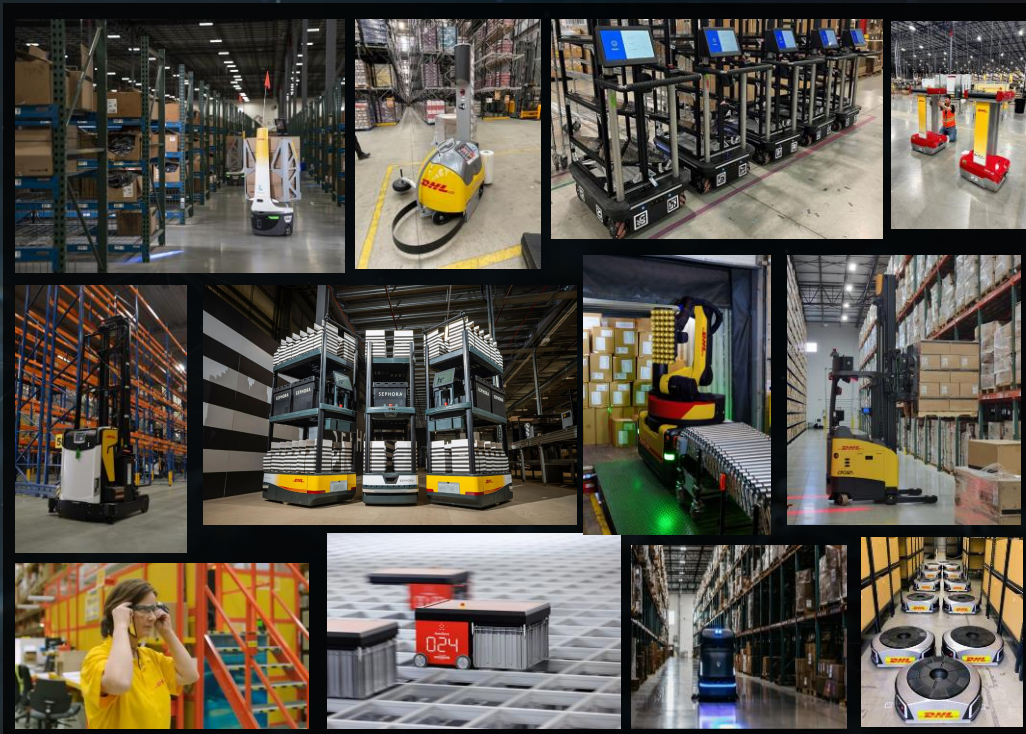
Identified 7 key project phases allow us to drive Accelerated Digitalization in a focused & orchestrated way



We have visibility on where we spend how much of our human labor. With AD&A we utilize this information to select our focus technologies and innovation areas

Visibility on labor hours per operational activity

Put-away, replenishment, pallet run	25%
Picking	35%
Packing	10%
(un)loading & Receiving	17%
Admin and communications	8%
Others	5%



We work with a clear focus on technologies that make a difference; #togetherunstoppable with a team across all functions

12 Accelerated Digitalization Focus technologies

Fast and flexible

Assisted
Picking Robots



(un)Loading
Robots



Intelligent
Process
Automation



Packing
Robots



Smart
Operations



Supporting
Robots



Goods-to-
Person Robots



AI & Data
Analytics



Sortation
Robots



Indoor Robotic
Transport



Wearable
Devices



Asset Tracking
& Monitoring



6 Automation Focus technologies

Mechanized, high-performance, fixed equipment

Automated
Order Picking



Automated
Storage &
Retrieval System



Packing/
Labelling
Automation



Mechanized
Sortation



Mechanized
(Un)Loading



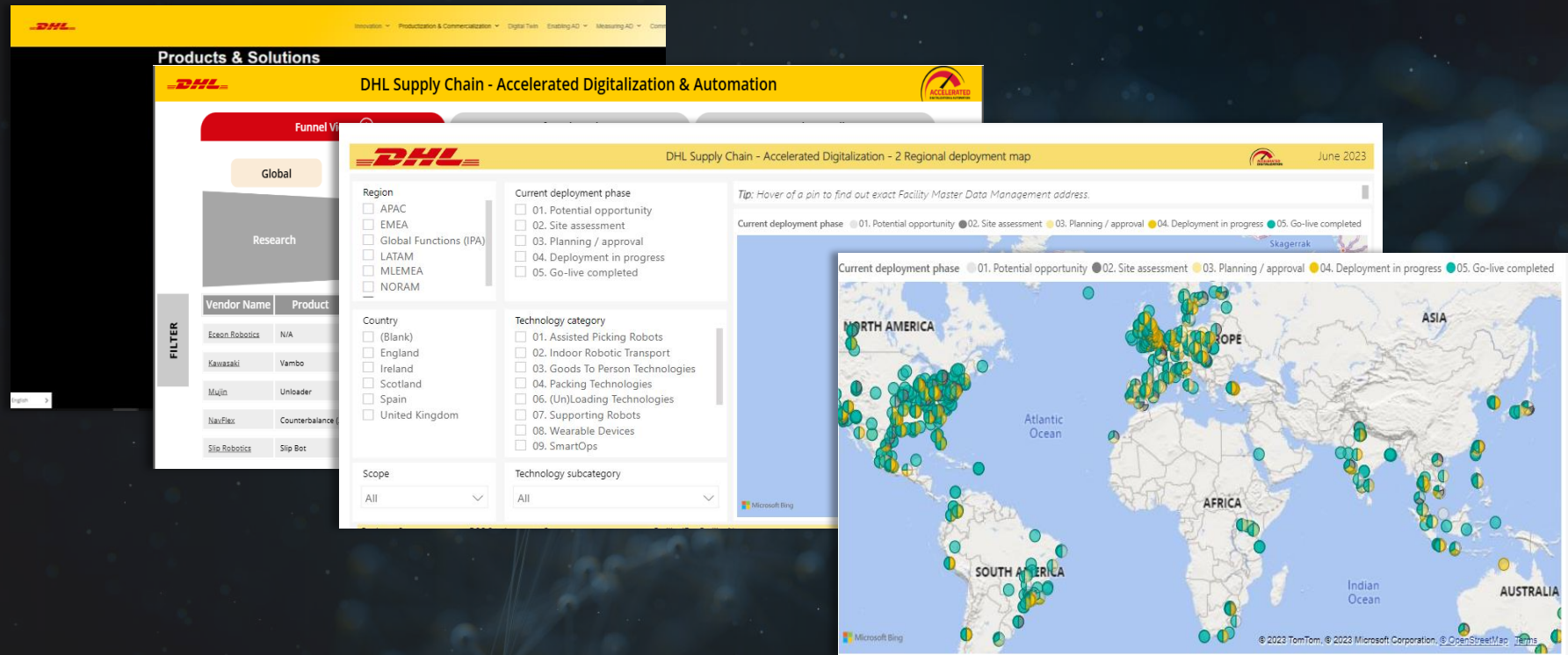
Powered
Conveyors



1 DHL Robotics Hub

Integration platform that enables orchestration capabilities

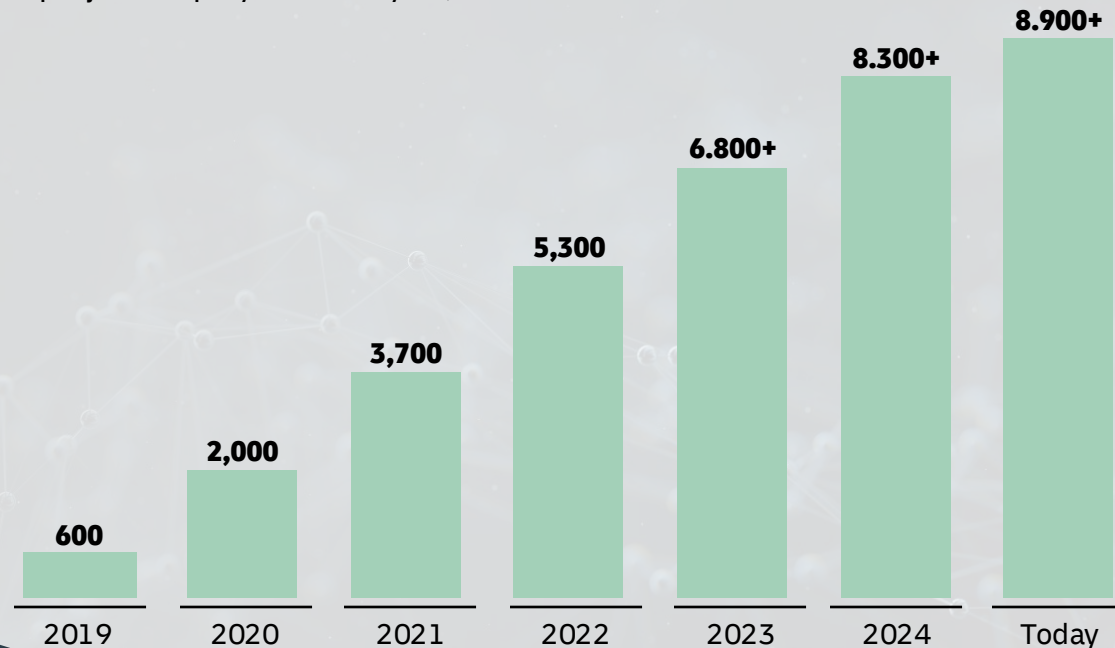
We work with focus and consistency across all regions – to rapidly identify and replicate best practices...



... and truly scale effective operational technology broadly across our business



projects deployed end of year, cumulative



Real innovation is when you implement at large scale...
... otherwise, it's just a nice idea.



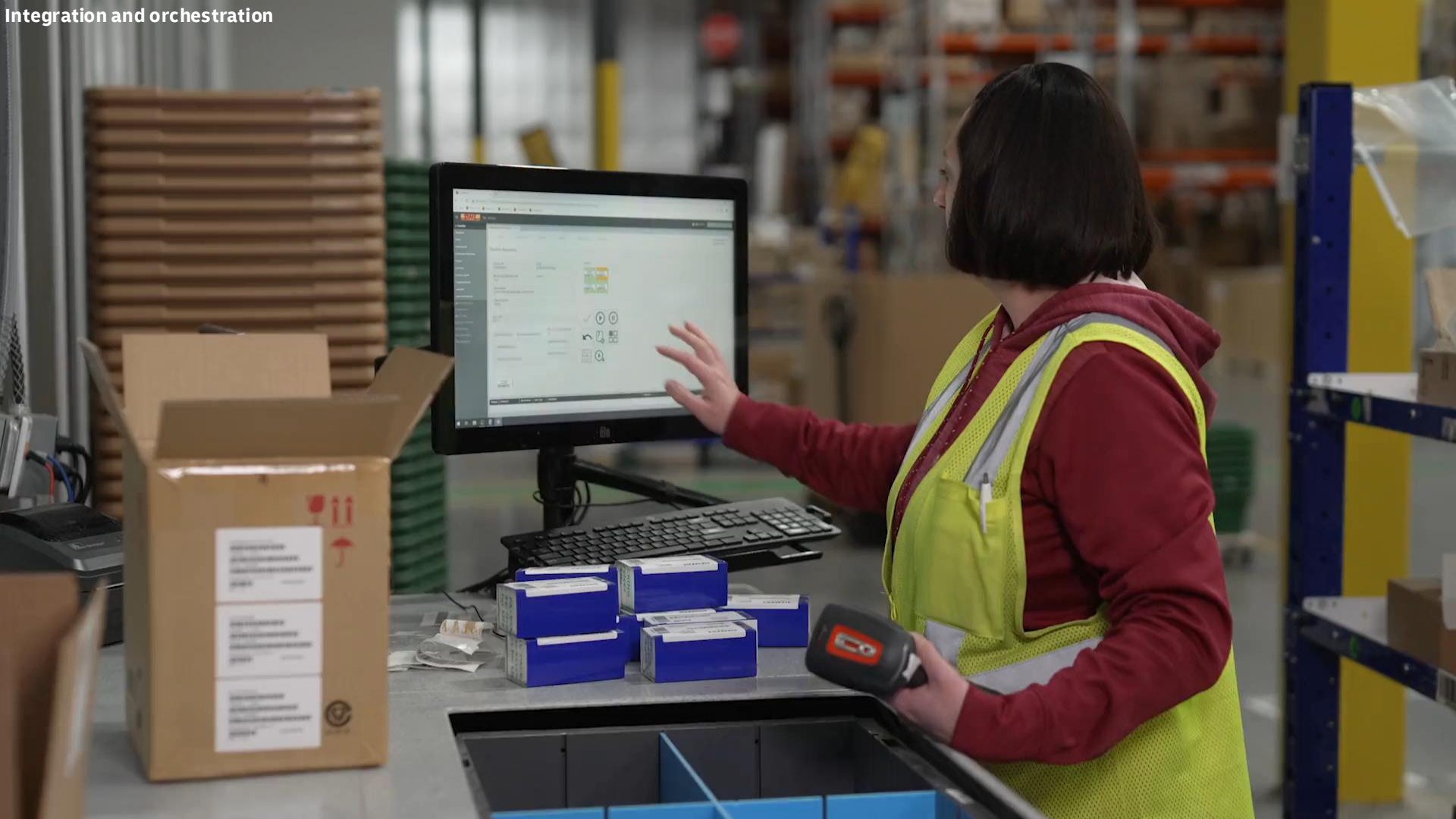
Warehouse associates: Focus shifts from strenuous physical labor to ensuring smooth operation of robots

Front Line Managers and planners: Managing both people and robots – and using data for unique insights

On-site IT/ Automation team: Acquiring basic robot hardware maintenance/ trouble shooting and data analytics skills

New roles added such as Automation & Robotics team, AGV Operations Manager and AGV Specialist







I'd say initially there was that fear.





Composable IT Solutions
maximizing re-use and scale
while allowing required region
and sector-specific
customizations

And how do AI and Gen AI fit in the picture?

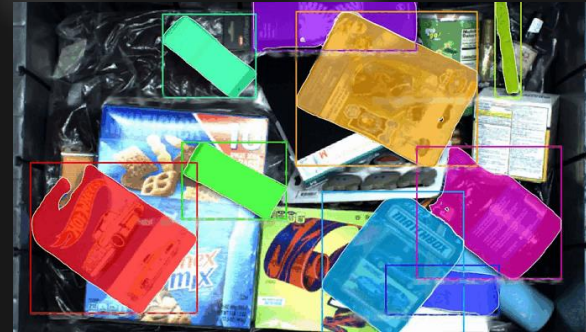


AI on the shop floor is already a reality in:

Autonomous Mobile Robots applications: Navigation

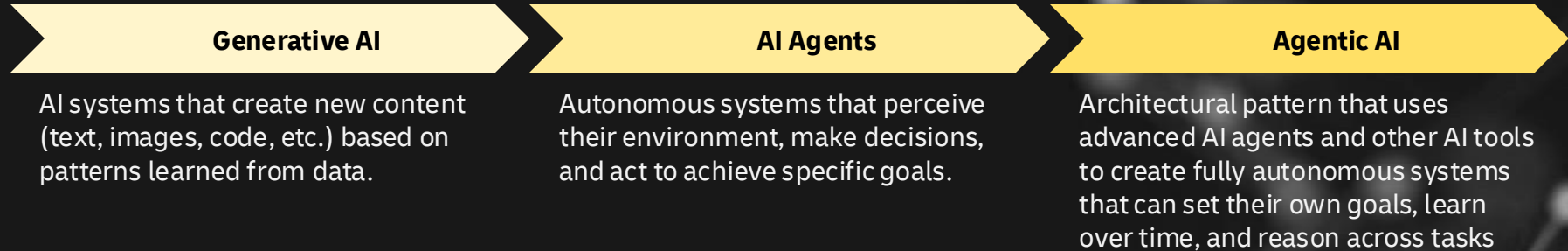


Co-bots applications: Recognition technologies



... and AI is already gaining momentum in Asset Tracking, Predictive Maintenance and Analytics and Robotic Process Automation (RPA)...

Generative AI is a type of artificial intelligence that can create new content, like text, images, or code, on its own without being explicitly programmed



AI transformation at DSC – built on key pillars for a streamlined Roll-out

Building sustainable internal AI capabilities

ML / AI to optimize operations



Touchless decision-making during disposition, improve cycle counts, slotting, picking

Talk to Your Data



Interact with data products via natural language

GenAI for RfP, contracts, data mapping



Streamlines contract reviews, response generation, system integration

Assistant Bots



Provides summarized information from systems or e.g., translations

Agentic solutions



Automate essential communications

➤ Transformation pillars

Policies

Technology

People & change mgt.

Governance (Gen)AI playbook



THANK YOU

We successfully deployed solutions for automating (un)loading of loose and palletized load and are scaling globally



Key benefits

- Reducing need for colleagues (un)loading, supporting them to focus on more value-adding tasks
- Reduced error rate
- Eliminating or assisting with the heavy burden of lifting cases (loose load)
- Can be combined with a robotic palletizer to further improve the process (end-to-end) (loose load)
- Improved efficiency for (un)loading cases

The first deployments of assisted picking robots laid the foundation for success, and we continue to implement and scale more solutions



Key benefits

- >30% increase in Units Picked Per Hour
- Less physical demanding work
- Minimizes worker fatigue
- Reduces error rate
- Increases employee satisfaction
- 80% decrease in training time



More mobile robotic solutions are maturing on the market and are implemented across our global warehouses



Key benefits

- Improved operational efficiency
- Less manual sorting for colleagues
- Less walking between locations
- Reduced errors
- Higher throughput
- Efficient use of space
- Can be easily scaled up or down for peak

