1. RTP + Static PPS:

Fashion and General Merchandise: Click and Collect:

Automate click and collect order pickups by putting inventory into mobile racks and letting customers pick up their orders by integrating with a locker system. Eliminate all human touch points in from the process.

Zero manual intervention for in-store pickup, $0 integration cost, 12-18 months ROI, 100% reduction in errors, Go Live in 4-8 months, Live reporting and dashboards.

Fashion: MFC/Dark store; Fashion, 3PL and General Merchandise: Ecommerce, Omnichannel, Retail:

- Utilizes GreyMatter for non-automated pick-put stations.

- Features include pick-to-light order bins, static bins, and options for roll cages or totes/boxes.

- Static Pick Put Station (PPS) setup enhances efficiency by moving items to operators, reducing manual handling.

- Supports picking by planogram to decrease dock to shelf time.

- Dynamic Storage for Goods on Hangers, cases, and returns.

- Optimized Picking Strategies for express orders, prioritizing returns, and meeting customer SLAs.

- Flexible Picking into totes, packing boxes, or order bins with easy flow switching.

- Real-Time Visibility for operations, order, inventory, and storage management.

2. RTP + Zero Walk:-

Fashion, 3PL, and General Merchandise: Omnichannel, Ecommerce; Fashion and 3PL: Retail

Pick orders from different channels at the same station while dynamically managing SLAS. Managed by a single software system.

• Technology: Batch picking and automated sorting with Autonomous Mobile Robots (AMRs).

• Efficiency: Up to 8x productivity increase.

• Cost Savings: 80%-90% reduction in labor costs.

• Return on Investment (ROI): Achieved in 18-30 months.

• Implementation Time: Go Live in 4-8 months.

• Deployment: Over 8,000 bots live, largest site hosts ~800 bots.

• Key Capabilities:

• Reduce Operator Walking Time: By more than 90%.

• Waveless Batch Picking: Allows batch picking without the need for sorting discrete orders.

• Inventory Flexibility: Supports a wide range of inventory through sortation AMRs or a hybrid solution with static bins.

• Real-Time Visibility: Provides an overview of operations in real time, managing orders, inventory, and storage efficiently.

3. RTP + MTU Subsystems

Up to 4x Productivity

100% reduction in conveyors for outbound

60%-70% reduction in labor

Go Live in 4-8 months

>8k bots live in production

Largest site with ~800 bots

Fashion: MFC

Automate order transfer with MTU picking subsystem—pick directly into a rack, moved to a central packing area by an RTP bot eliminating the need for conveyors

Fashion, 3PL, and General Merchandise: Omnichannel, Retail

• Automates order transfer, dynamically manages SLAs, supports ecommerce and retail orders.

• Dynamic Storage: Stores Goods on Hangers, cases, eaches, pallets, and returns inventory.

• Optimized Picking Strategies: Prioritizes express and returns inventory orders to meet customer SLAs.

• Post Pick Automation: Moves picked orders to packing stations or outbound staging without conveyors or MHEs.

• RTP Bots: Used for moving racks to packing areas and outbound staging/consolidation.

• Real-Time Visibility: Provides an operational overview in real-time, manages orders, inventory, and storage.

4. RTP + Pick to Packing Box

Up to 4x Productivity

Reduce Cost Per Unit by ~60%

ROI in 18-30 months

Go Live in 4-8 months

>8k bots live in production

Largest site with ~800 bots

Fashion: Ecommerce

- Automates picking into packing boxes from an RTP system using tote-to-person bots, avoiding bottlenecks.

- Uses GreyMatter software, ensuring industry-leading cost efficiency.

- Direct picking into boxes enhances single-touch pick-to-pack flow, eliminating packing bottleneck.

- Improved picking ergonomics by staging boxes at convenient levels.

- Post-pick, boxes move to packout or outbound without conveyors, reducing need for manual handling.

- Offers real-time operational visibility, enabling management of orders, inventory, and storage.

5. Manual

Upto 20% improvement in packing speed

60% reduction in SW cost for packing

99% reduction in errors

$0 integration cost

Single flow for packing multis and singles

Up to 20% reduction in supervision cos

(Packing) Fashion and General Merchandise: Omnichannel; Fashion: MFC

- GreyMatter offers centralized or Goods-to-Person station packing.

- Integrates with overhead RFID readers for enhanced operation.

- Automates packaging selection and exception handling for increased workflow flexibility.

- Customizable packing flow for optimal efficiency.

- Utilizes a hospital app for efficient exception management.

- Features RFID integration for scan-free packing processes.

- Provides real-time tracking for individual stations and overall packing efficiency.

(Deep Storage) Fashion and General Merchandise: Retail, Omnichannel, Ecommerce;

- Eliminates need for manual slotters, picklists, and SOP-based replenishment.

- Uses handheld devices for efficient operations in replenishment, picking, and putaway.

- Key Capabilities:

- Fashion: Proactive and reactive replenishment from deep storage to active areas.

- General Merchandise: Efficient organization and retrieval based on client priorities; regular audits for accurate inventory.

- Differentiators:

- Dynamic Slotting: Automated slotting by product velocity and affinity.

- Proactive Replenishment: Predicts and implements replenishment based on order trends.

- Pick Path Optimization: System-driven optimization of picking routes.

- Real-Time Visibility: Live operational monitoring for enhanced oversight.

6. RIL-L

2-3x Productivity

ROI in 6-8 months

70%-80% reduction in MHEs

Go Live in 8-10 weeks

80+ bots on a single site in production

<50k upfront investment

(Inbound and Outbound: Intralogistics) : Fashion, 3PL, and General Merchandise: Retail, Omnichannel, Ecommerce

RIL-L, powered by SLAM technology, facilitates plug-and-play operations for autonomous inbound material movement across zones without disrupting manned areas. Minimal infrastructure modifications required.

(Deep storage) Fashion, 3PL, and General Merchandise – Retail, Omnichannel, Ecommerce

GreyMatter powered cobot solution that lets you pick cases from deep storage. The RIL bots use SLAM-based navigation, and the solution employs a mix of swarming and lead-me technologies. Requires minimal infrastructure changes.

(Forward Pick: Person to Goods) General Merchandise and 3PL: Retail

7. RIL - L Case Pick

Allows mixed SKU pallets to be picked using swarming and lead-me technologies in our RIL bots. Pallets are built using our palletizing and layering logic, and the system allocates zones to operators according to pick density.

Key Capabilities

- Labor Optimization: Eliminates repetitive manual work in inbound material transfer. Boosts productivity by 2x-3x through reduced operator walking time, better picking ergonomics, and enhanced employee satisfaction at minimal cost per picker.

- Enhanced Safety: 360-degree view, obstacle detection, configurable audio for safety. Benefitted from safety-rated 2D & 3D LiDAR sensors and always-learning GreyMatter minimizing accidents and maximizing fulfillment efficiency. Operates as a zero-accident solution with state-of-the-art LIDAR-based SLAM navigation.

- Real-Time Visibility: Live operations overview for enhanced monitoring. Real-time visibility of inventory. Offers a competitive edge in warehouse management with GreyMatter integration.

- Data-Driven Improvements: Data analytics for continuous performance optimization.

- Efficiency: Customizable packing flow for maximized efficiency. Works right out of the box with go-live in days/weeks and fast ramp-up, requiring minimal operator training.

- Exception Handling: Efficient use of hospital app for exceptions.

- RFID Integration: Integrates with RFID scanners for no-scan packing flow.

- Real-Time Visibility: Tracks real-time data for pack stations and overall packing efficiency.

- Operator Guidance: Wearable device-based system for tasking. Pallet type agnostic solution that can work on all pallet types within the same warehouse.

- Dynamic Zoning: System adjusts pick zones dynamically based on order pool density. Quick payback period & ROI with payback starting within 1 year of operation and expected TCO reduction of 25~40%.

- Industry: Fashion

- Deep storage for inventory management.

- Proactive and reactive replenishment in active areas for operational efficiency.

- Use of cobots for automating material movement (pallets, trolleys, rollcages) alongside humans and Material Handling Equipment (MHEs).

- Industry: General Merchandise

- Efficient management and organization of diverse inventories.

- Prioritization of retrieval based on client agreements.

- Regular audits for accurate inventory maintenance.

- Efficient goods movement across different client inventories.

- Prioritization of inbound transportation based on client agreements and product types.

8. RIL-H

2-3x Productivity

ROI in 6-8 months

70%-80% reduction in MHEs

Go Live in 8-10 weeks

80+ bots on a single site in production

<50k upfront investment

(Inbound and Outbound: Intralogistics) Fashion and General Merchandise: Retail DC,

Leveraging SLAM technology, RIL-H enables plug-and-play autonomy for inbound material movement across zones (ex. deep storage, cross-dock, and forward pick areas). Operates from the ground or in an elevated position.

Key Capabilities

Labor Optimization: Removes repetitive manual work in transferring inbound material

Enhanced Safety: 360-degree view, obstacle detection, and configurable audio for a secure operating environment. Benefitted from safety-rated 2D & 3D LiDAR sensors and always-learning GreyMatter minimizing accidents and maximizing fulfillment efficiency.

Real-Time Visibility: Live overview, enhancing operations monitoring. Real-time visibility of inventory.

Data-Driven Improvements: Utilizes data analytics to support continuous enhancement initiatives for optimized performance.

- Fashion Industry

- Utilization of cobots (collaborative robots) for automated movement of materials (pallets, trolleys, roll cages).

- Designed to work alongside humans and Material Handling Equipment (MHEs) seamlessly.

- General Merchandise Industry

- Efficient goods movement between client inventories.

- Inbound transportation prioritization based on client agreements and product types.

- Aimed at facilitating smooth material movement to satisfy diverse client needs.

9. Ranger Assist

- Up to 3x productivity increase

- ROI achievable in 3-12 months

- Labor savings of 30%-40%

- Deployment possible in 3-8 weeks

- Supports up to 220 lbs payload

- Active in multiple live sites, including fashion and 3PL retail sectors

- Hybrid picking system accommodating peak order surges

- Powered by GreyMatter, enhancing cobot technology for faster order fulfillment

- Seamless integration without layout changes for minimal disruption

- Ergonomic design reducing workplace injuries by 70%

- Offers real-time operational visibility for efficient order, inventory, and storage management

- Automated slotting for reduced congestion and improved picking efficiency

- System directed operations with handheld guidance and pick location suggestions

- Flexible picking system for Goods On Hanger and flat goods, supporting batch and discrete picking

- Designed to meet high-yield fulfillment demands, especially during peak seasons

- Zero downtime implementation with rapid deployment capability

- End-to-end inventory visibility for effective omni-channel fulfillment

- Scalable and modular design to adapt to changing business needs and support growth

10. TTP + Multilevel

Fashion: Retail, Omnichannel, Ecommerce

Forward Pick: Goods to Person

- GreyMatter-powered Tote-to-Person solution.

- Increases storage density by 4-5x.

- Features a takeaway conveyor for transferring totes to pack stations.

- Allows picking orders across channels at the same station.

- Dynamically manages SLAs.

- Ergonomic picking with conveniently staged order boxes/totes.

- Optimized picking strategies including planogram for in-store fulfillment.

- No need for specialized infrastructure; uses existing racking and totes.

- Provides real-time visibility of operations, orders, inventory, and storage.

11. TTP + Putwall

Fashion: Retail, Omnichannel, Ecommerce

- GreyMatter Tote-to-Person solution: 4-5x storage density, Pick-To-light bins.

- Multichannel picking at same station, dynamic SLA management.

- Flexible Picking: Totes, boxes, or bins; seamless flow switching.

- Storage Efficiency: Utilizes vertical space up to 33 feet.

- No Specialized Infrastructure: Compatible with existing racking and totes.

- Real-Time Visibility: Operations overview, order/inventory/storage management.

12. TTP + Pick to Packing Box

Fashion: Ecommerce

- Utilizes GreyMatter technology for Tote-to-Person solution, enhancing storage density by 4-5 times.

- Erector-produced boxes are automatically moved to pick stations, reducing bottlenecks and CPU usage.

- Enables direct picking into packing boxes, streamlining the process with a single touch from pick to pack.

- Features optimized picking strategies for express orders, prioritizing returns inventory, and meeting customer SLAs.

- Compatible with existing racking and totes, requiring no specialized infrastructure.

- Offers real-time visibility and management of orders, inventory, and storage for warehouse managers.

13. TTP

General Merchandise: MFC

Our GreyMatter-powered Tote-to-Person solution allows up to 5 deep inventory storage and can handle chilled and frozen items. Pick items at a single station where the bot stages the order and makes it available for extraction.

Key Capabilities

Storage Density: Get a storage density as high as 5 totes per sq. ft.

Temperature Controlled: Ability to integrate temperature controlled tote for frozen and chilled SKUs

Consolidation: Use the picking area for consolidation as well

Extraction: Automated staging and extraction for route wise loading of delivery vans

14. RTP + TTP

Fashion and General Merchandise: Retail, Omnichannel, Ecommerce

- Increase storage density by 4x-5x using racks for hangers and totes for flats.

- Pick directly from Multi-Shuttle Units (MSUs) and totes, eliminating need for separate consolidation.

- Flexible storage for larger inventory or Goods on Hanger (GOH) without sacrificing density.

- Combined picking from racks and totes streamlines operations.

- Optimized picking for express orders, in-store planogram fulfillment, prioritizing returns, and meeting SLAs.

- Real-time visibility and management across orders, inventory, and storage for warehouse managers.

15. RMS

RMS enables fast and precise package sorting based on carriers and zip codes, supporting up to 1200 parcels per hour.

Integrates seamlessly with MAO for adaptable throughput and optimal capacity utilization, adjusting to changing demand patterns.

Designed for omnichannel sortation in fashion and general merchandise, enhancing flexibility and efficiency in fulfillment processes.

Key features include:

Portable and adaptable robotics suitable for dynamic business needs and demand peaks.

Offers outbound sortation by carriers and the ability to change end sort locations on the fly without downtime.

Eliminates the need for expensive fixed sortation systems, reducing capital expenditure.

Provides real-time visibility and management for orders, inventory, and storage, ensuring accurate and efficient fulfillment.

Enhances operational efficiency through increased throughput and optimized inventory flows, leading to sustainable productivity boosts.

Significantly reduces supply chain costs and labor requirements, demonstrated by projected cost savings and labor reductions in case studies.

Offers customizable process flows with sorting accuracy up to 99.99%, allowing for efficient management of congestion and operational flexibility.

Features dynamic process flow orchestration, intelligently managing material flow across robotic agents to generate higher throughput.

RMS's software-first approach and fluid architecture support scalable and cost-effective deployment, adaptable to future-proof designs.

RMS and the GreyMatter platform facilitate communication among robots, optimizing order fulfillment priorities and inventory movement patterns.