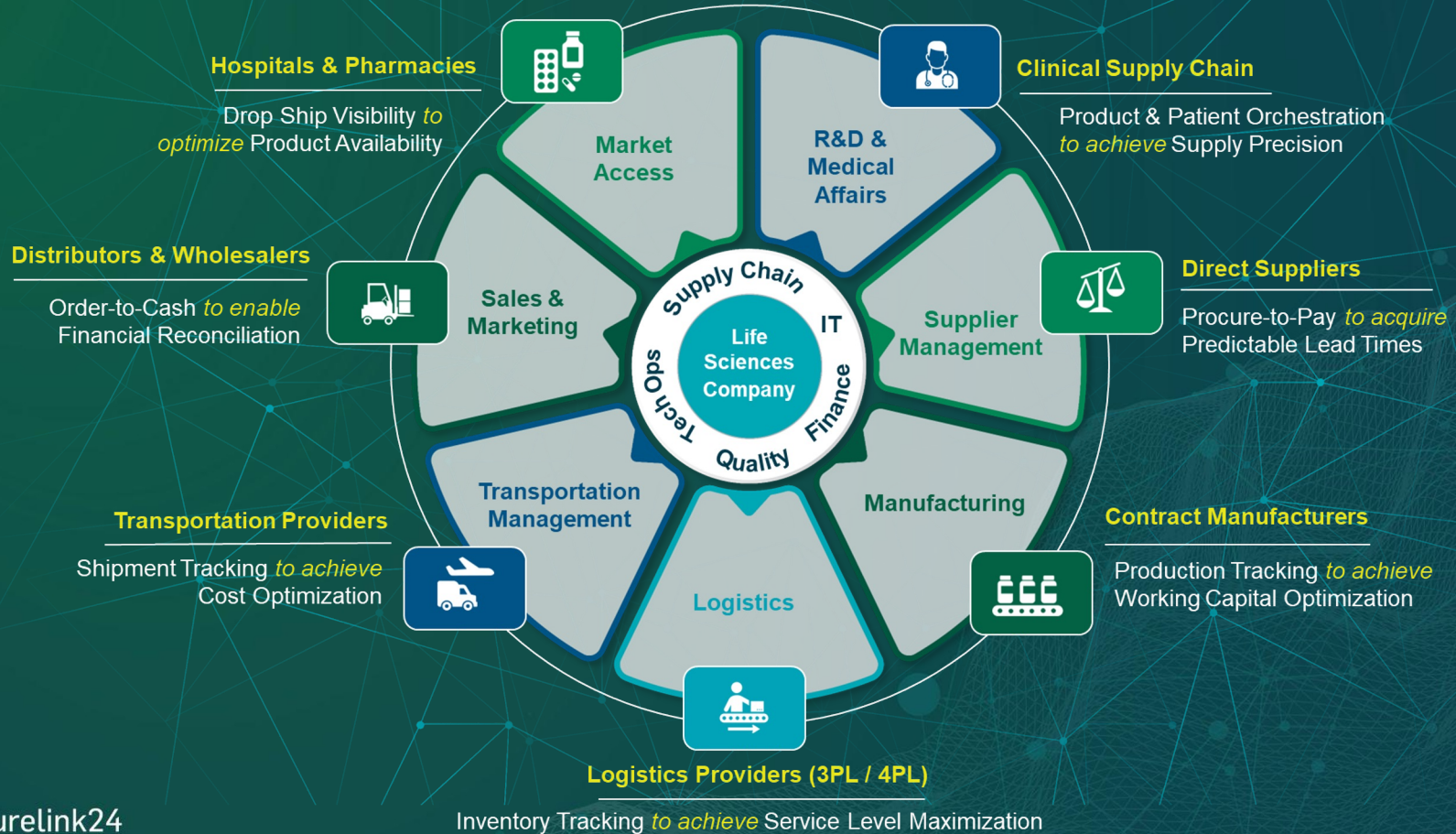# Looking Forward: Direct Supply, Clinical Supply and Other Supply Chain Relationships

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John Jacey

futurelink

Orchestrating Outcomes in Direct Supply

Direct Supply Orchestration

Your Company

- Direct Supply Management
- Supply Chain
- External Manufacturing
- IT

- US HQ Virtual MAH
- 50+ Global Markets Served
- Procures All Direct Supply
- 5+ CMO + Materials 3PL

- EU HQ
- Specialty Filters and Filtration Systems
- One Time Use Materials

Voice of the Customer – We aim to…

1. Digitalize procure-to-pay for 100% of direct suppliers
2. Rapidly expand integrations at a predictable, low cost
3. Ensure OTIF supply of specialty filters, reduce shortages

Voice of the Partner – We aim to…

1. Support customers' digitalization initiatives
2. Improve production planning with more accurate and timely customer forecast and order data
3. Streamline order-to-cash process, meet OTIF commit

Suppliers

- Client Manager
- Production Planning
- Production Operations
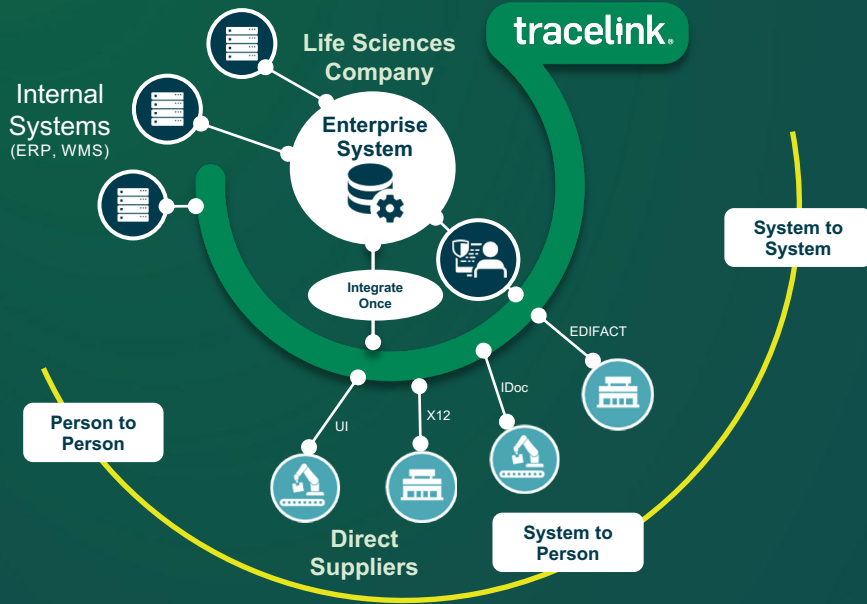- IT

MINT for Direct Supply

Integrate-Once™ for:

- Forecast Planning Schedule
- Forecast Planning Schedule Response
- Purchase Order
- PO Acknowledgement
- Advance Ship Notice
- Invoice
- Remittance Advice

The Benefits of Direct Materials Supply Orchestration

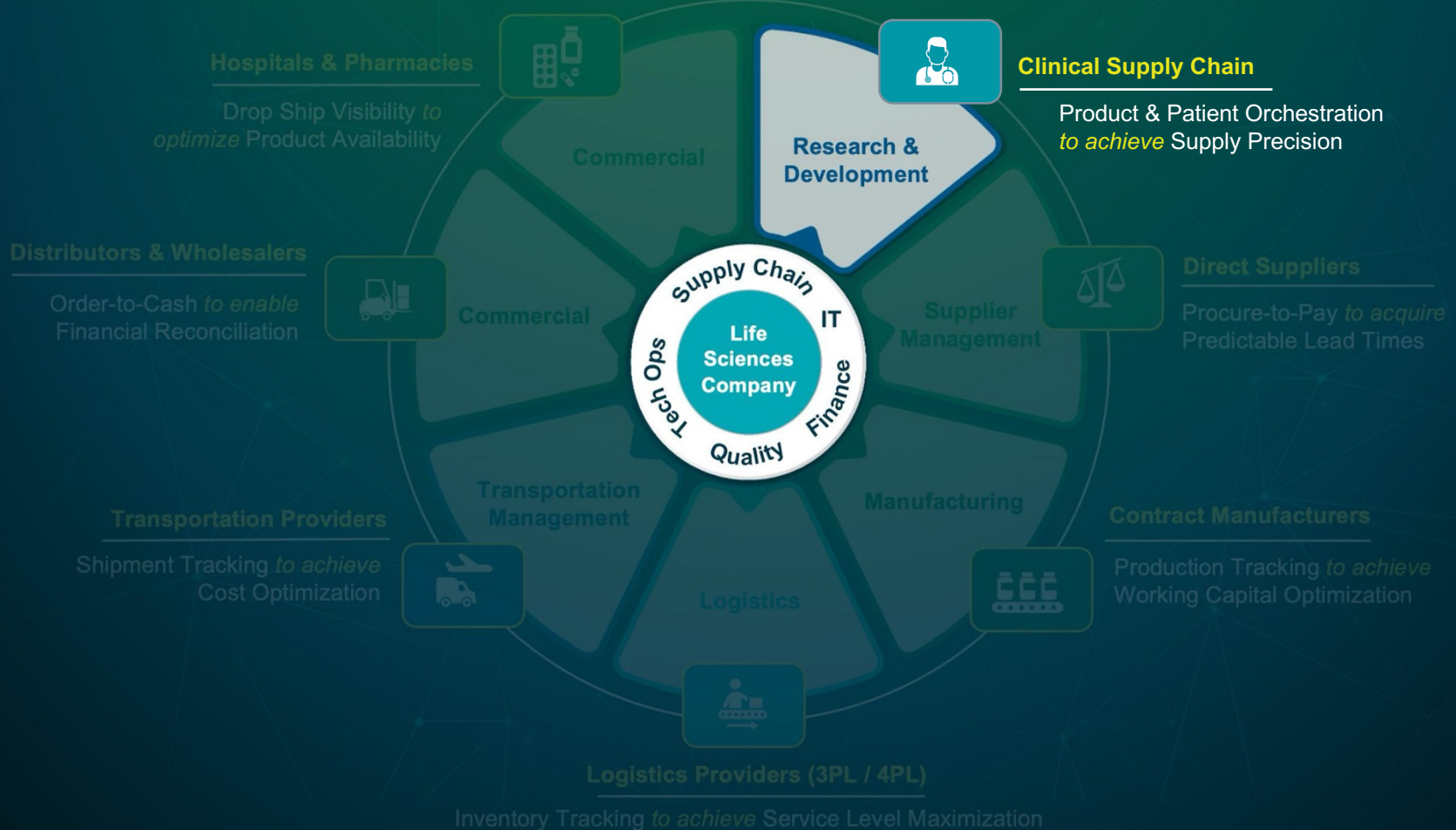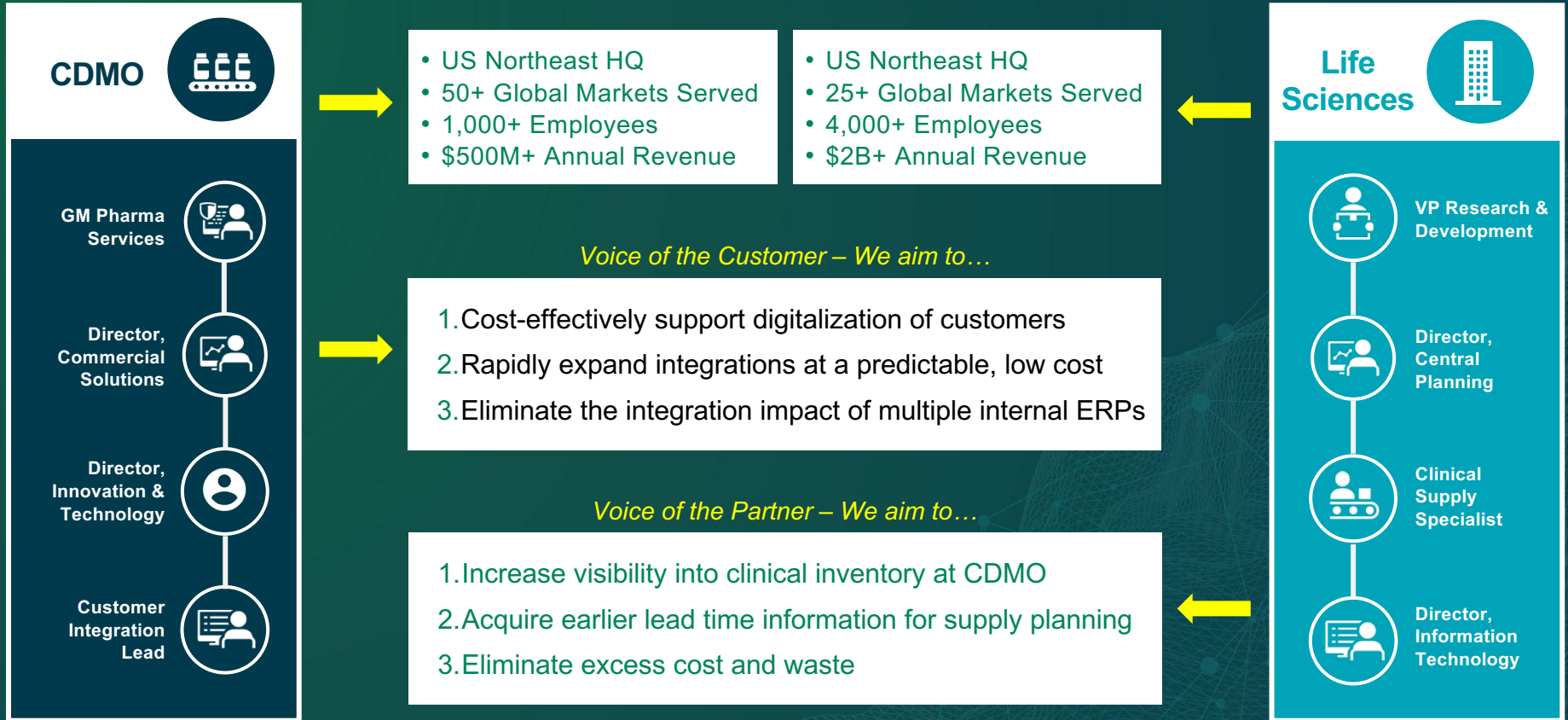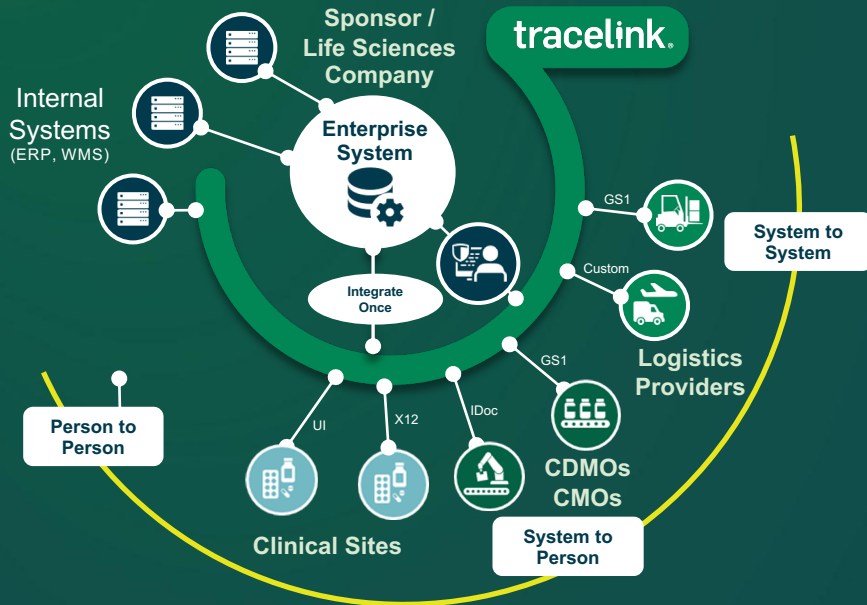| Use Case:	Customer & Partner Business Value:
Forecast Collaboration • **Forecast Planning Schedule with Release** • **Forecast Planning Response**	• Ensures alignment with direct materials suppliers to improve agility and reduces late or missed shipments. • Forecast collaboration enables safety stock inventories to be reduced over time as supplier deliveries become more predictable and reliable.
Order Collaboration & Monitoring • **Purchase Order** • **PO ACK** • **Advance Ship Notice** • **Invoice** • **Remittance Advice**	• Improves planning accuracy with real-time confirmation of PO quantities and due dates. • Respond more quickly to demand changes and supply chain disruptions. • Reduced effort to manage purchase orders which enables greater flexibility in order size and frequency which improves supply chain agility. • Improvise OTIF *from* Supplier and *to* Customer

Orchestrating Outcomes in Clinical Supply Chain

Hospitals & Pharmacies
Drop Ship Visibility *to optimize* Product Availability

Clinical Supply Chain
Product & Patient Orchestration *to achieve* Supply Precision

Distributors & Wholesalers
Order-to-Cash *to enable* Financial Reconciliation

Direct Suppliers
Procure-to-Pay *to acquire* Predictable Lead Times

Transportation Providers
Shipment Tracking *to achieve* Cost Optimization

Contract Manufacturers
Production Tracking *to achieve* Working Capital Optimization

Logistics Providers (3PL / 4PL)
Inventory Tracking *to achieve* Service Level Maximization

Research & Development

Commercial

Commercial

Supplier Management

Transportation Management

Manufacturing

Logistics

Supply Chain

IT

Tech Ops

Finance

Quality

Life Sciences Company

Clinical Supply Chain Orchestration "in the Wild"

CDMO

- GM Pharma Services
- Director, Commercial Solutions
- Director, Innovation & Technology
- Customer Integration Lead

Life Sciences

- VP Research & Development
- Director, Central Planning
- Clinical Supply Specialist
- Director, Information Technology

- US Northeast HQ
- 50+ Global Markets Served
- 1,000+ Employees
- $500M+ Annual Revenue

- US Northeast HQ
- 25+ Global Markets Served
- 4,000+ Employees
- $2B+ Annual Revenue

Voice of the Customer – We aim to…

1. Cost-effectively support digitalization of customers
2. Rapidly expand integrations at a predictable, low cost
3. Eliminate the integration impact of multiple internal ERPs

Voice of the Partner – We aim to…

1. Increase visibility into clinical inventory at CDMO
2. Acquire earlier lead time information for supply planning
3. Eliminate excess cost and waste

#futurelink24

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MINT for Clinical Supply

Integrate-Once™ for:

- Inventory Balance Request
- Inventory Balance Report
- Inventory Status (Release Status)
- Inventory Status (Kit Status Change)
- Ship Order Request
- Ship Order Acknowledgement
- Shipping Advice
- Advance Ship Notice (Despatch Advice)
- Receiving Advice
- Dispensing Advice
- Drug Return Order
- Destruction Confirmation

The Benefits of Clinical Supply Orchestration

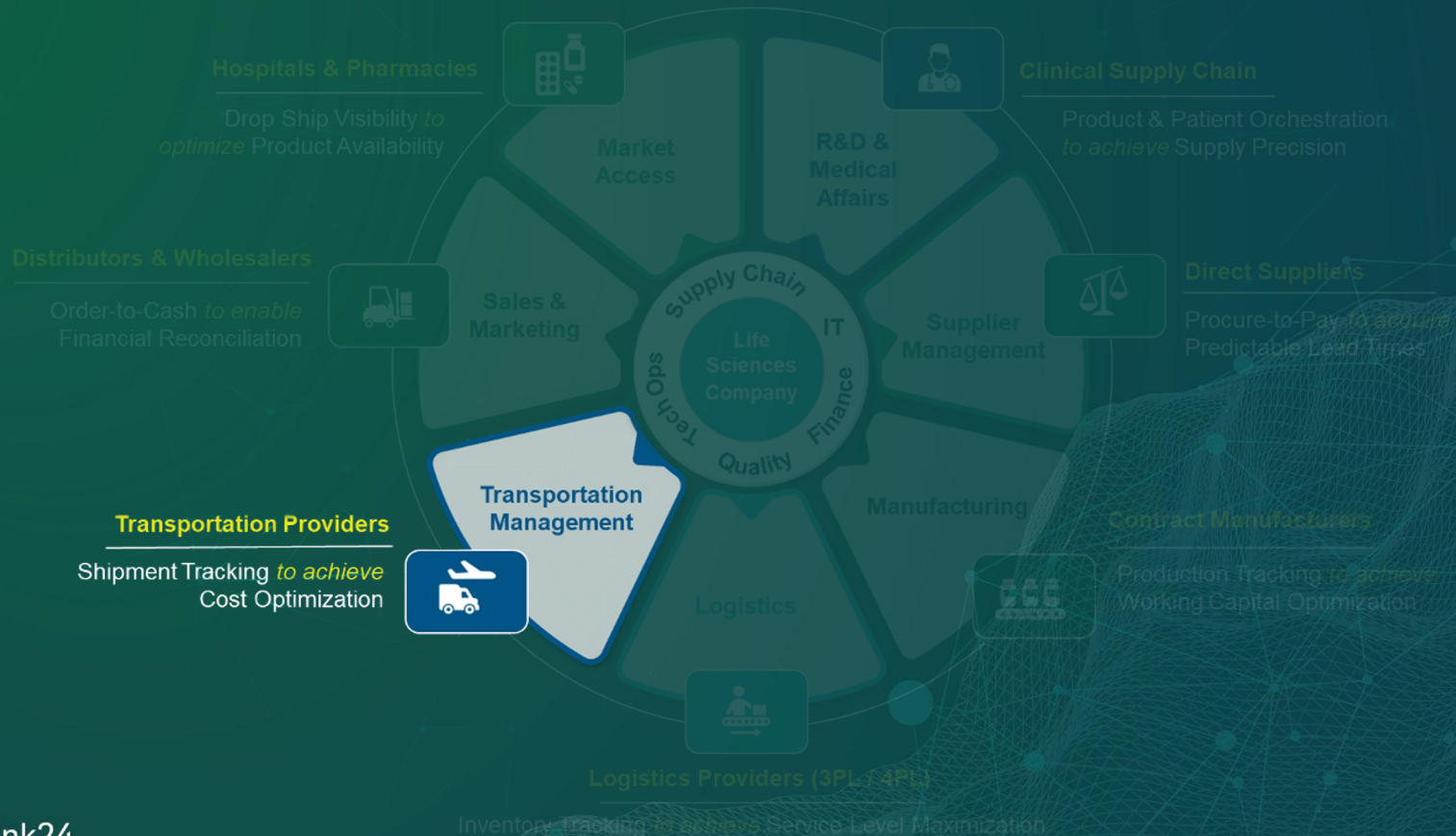| Use Case	Benefits of Orchestration
Real-Time Inventory Management • Inventory Balance • Inventory Status (Release, Kit Status Change) • Destruction Confirmation	• Improve clinical supply **planning and replenishment** with aligned inventory levels across CMO and depot sites • Monitor stock levels at CMO and depot sites to ensure **availability** and **on-time supply** of clinical kits for trial subjects • Manage **shelf-life and expiry** of materials across country-specific regulations • Maintain continuous stock **visibility** to ensure sufficient supplies while **minimizing cost and waste** of investigational medicinal product
Continuous Clinical Kit Visibility • Ship Order and Advice • Advance Ship Notice • Receiving Advice • Dispensing Advice • Drug Return Order	• Manage **end-to-end distribution** from production to depot to clinical sites • Maintain **full visibility** to clinical product transferred from CMOs to 3PLs • Ensure **on-time supply** for trial subjects across treatment plan • Ensure **clinical site preparedness** by providing confirmed quantities, tracking numbers, and delivery dates

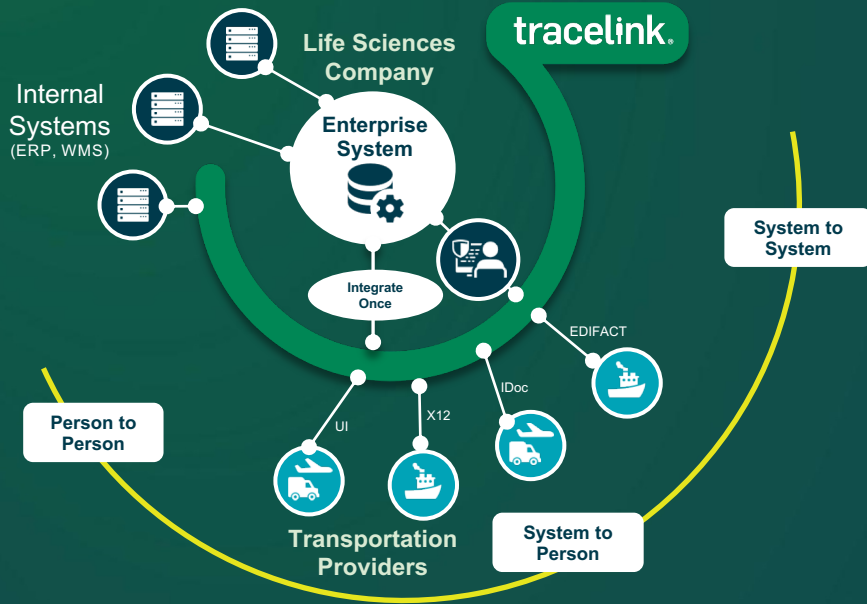# Orchestrating Outcomes in Transportation

Transportation Orchestration

Your Company

- Transportation
- Supply Chain
- Customer Service
- IT

- US Midwest HQ
- 98+ Global Markets Served
- 41,000+ Employees
- $29B+ Annual Revenue

- US Southeast HQ
- 11K+ Trucks
- 22,000+ Employees
- $19B+ Annual Revenue

Carriers

- Business Development
- Supply Chain
- Transportation
- IT

Voice of the Customer – We aim to…

1. Book carriers electronically at best freight rates
2. Fully integrate with contract carriers
3. Improve in-transit visibility and delivery status

Voice of the Partner – We aim to…

1. Support contract customers' digitalization initiatives
2. Receive all booking requests directly from shippers
3. Provide in-transit visibility to all shippers

*May be handled by either partner

MINT for Transportation

Integrate-Once™ for Multimodal Transportation for Air, Ocean, Rail and Motor Carriers:

- Transportation Booking Request
- Transportation Booking Confirmation
- Bill of Lading
- Manifest
- Waybill
- Routing Instructions
- Customs Documentation
- Shipment Status
- Invoice

The Benefits of Transportation Orchestration

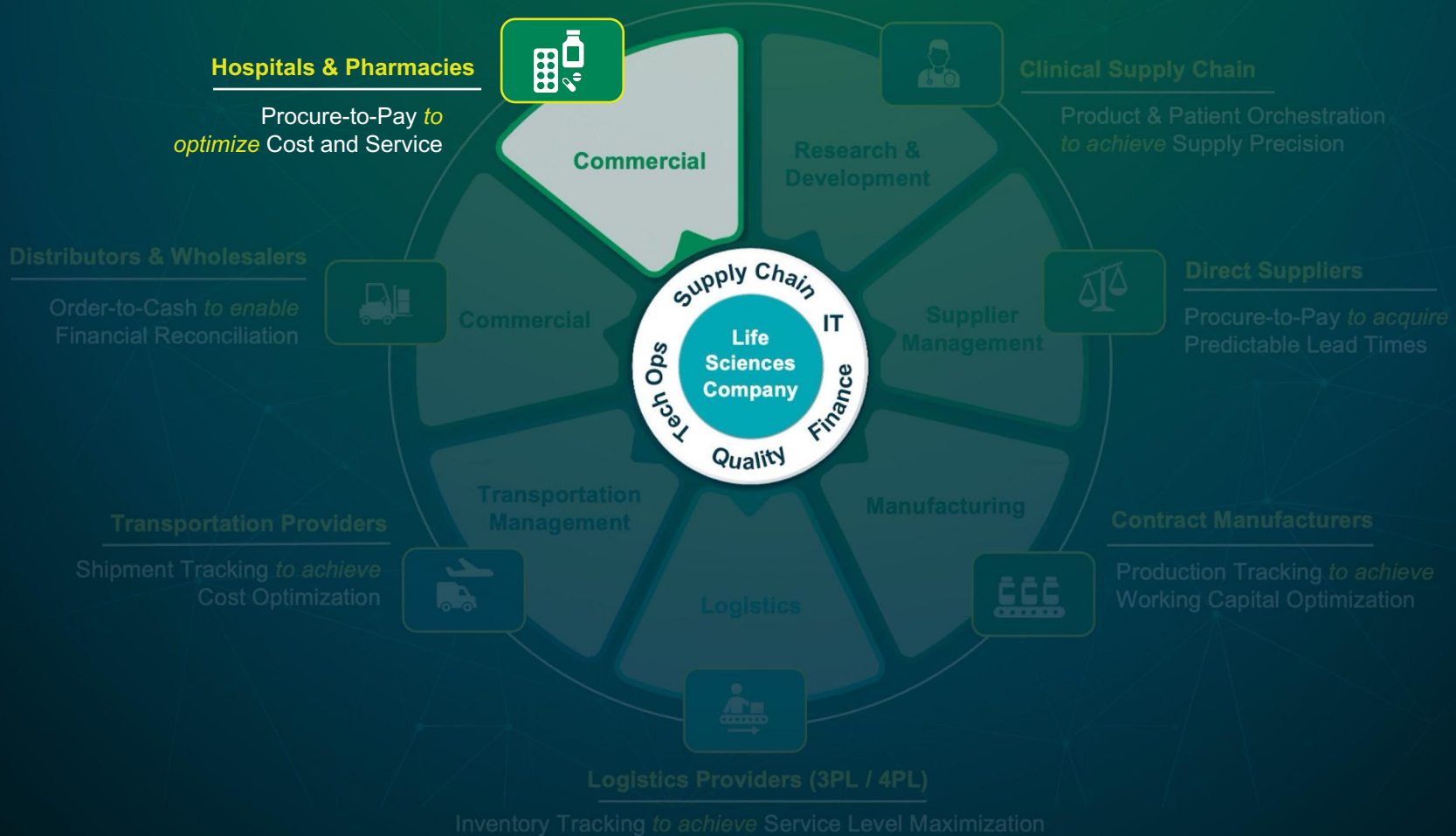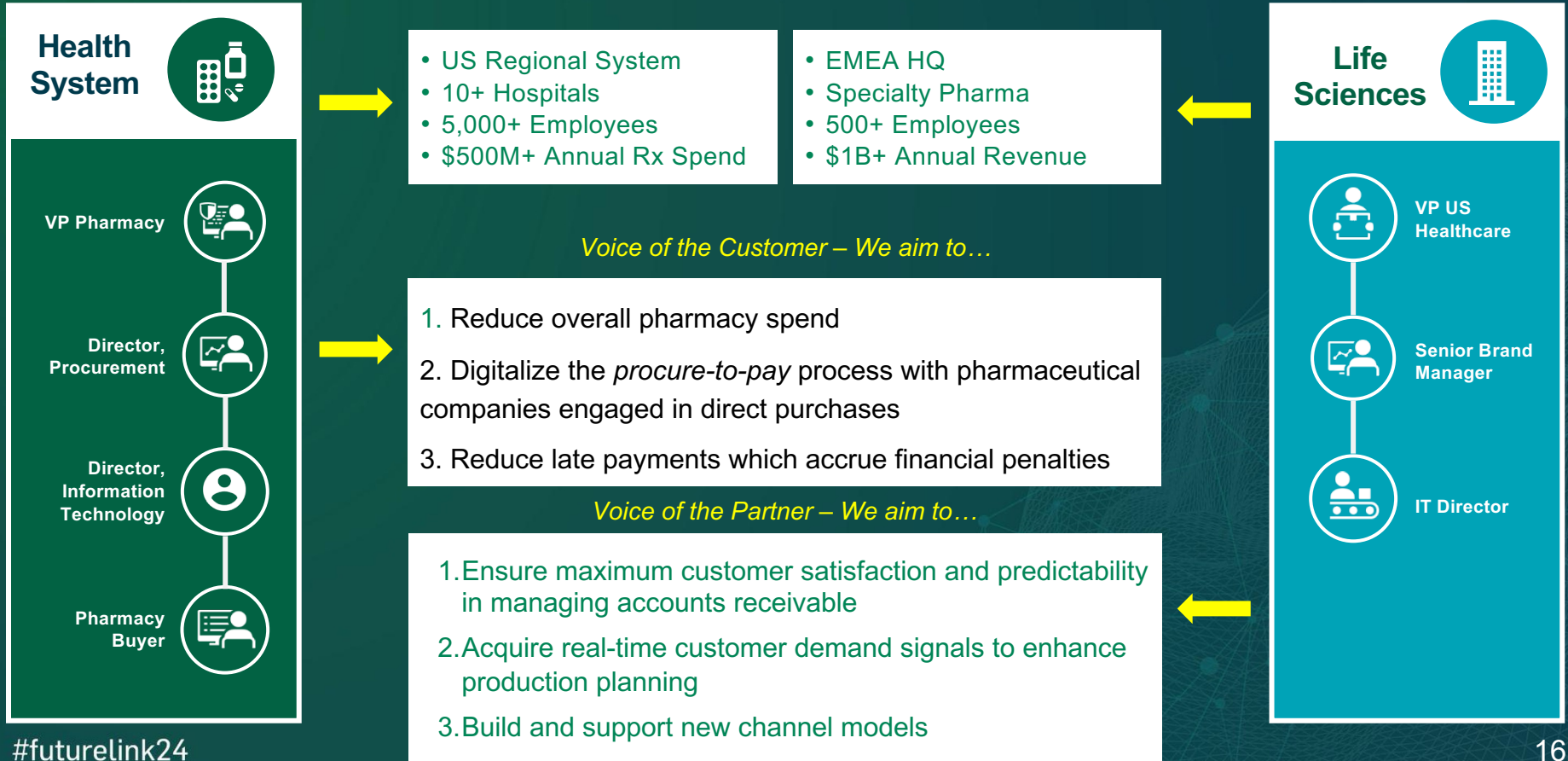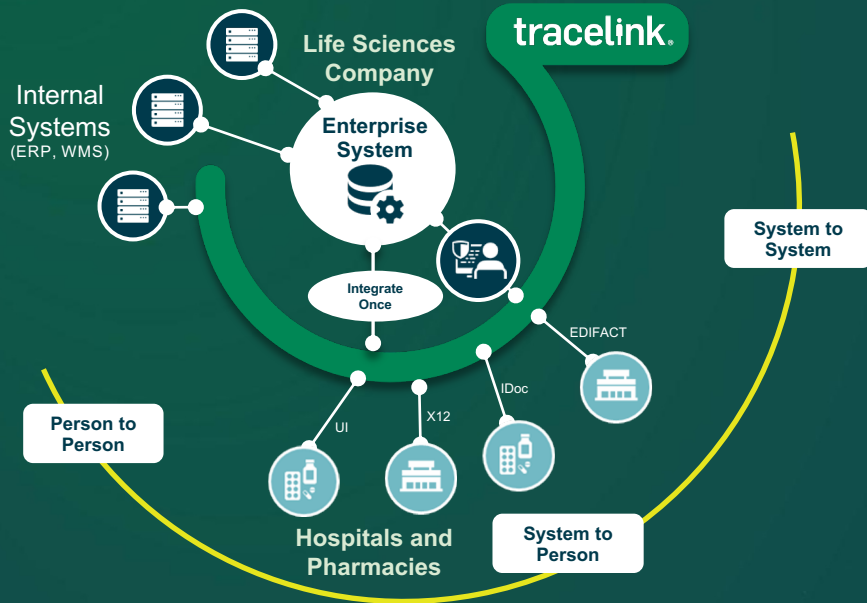| Use Case:	Value:
• **Transportation Booking Request** • **Transportation Booking Confirmation**	• Electronically book carriers across land, sea, rail, and air with a single integration. • Confirm carriers rapidly at the lowest freight rates..
• **Bill of Lading** • **Manifest** • **Waybill** • **Routing Instructions**	• Ensure carriers have accurate shipping documents to avoid delays. • Exchange customs documents to ensure border crossings for international shipments are not quarantined. • Provide instructions to streamline the logistic process, reduce friction and cost, and enhance relationships across the supply chain.
• **Shipment Status** • **Invoice**	• Real-time shipment status to reduce customer service effort while improving customer satisfaction. • Electronic invoicing to reduce the complexity of transportation billing.

Orchestrating Outcomes in Digital Commerce

Hospitals & Pharmacies

Procure-to-Pay *to optimize* Cost and Service

Clinical Supply Chain

Product & Patient Orchestration *to achieve* Supply Precision

Distributors & Wholesalers

Order-to-Cash *to enable* Financial Reconciliation

Direct Suppliers

Procure-to-Pay *to acquire* Predictable Lead Times

Transportation Providers

Shipment Tracking *to achieve* Cost Optimization

Contract Manufacturers

Production Tracking *to achieve* Working Capital Optimization

Logistics Providers (3PL / 4PL)

Inventory Tracking *to achieve* Service Level Maximization

Commercial · Research & Development · Supplier Management · Manufacturing · Logistics · Transportation Management · Commercial

Supply Chain · IT · Finance · Quality · Tech Ops

Life Sciences Company

Digital Commerce Orchestration "in the Wild"

Health System

- VP Pharmacy
- Director, Procurement
- Director, Information Technology
- Pharmacy Buyer

US Regional System
- US Regional System
- 10+ Hospitals
- 5,000+ Employees
- $500M+ Annual Rx Spend

EMEA HQ
- EMEA HQ
- Specialty Pharma
- 500+ Employees
- $1B+ Annual Revenue

Life Sciences

- VP US Healthcare
- Senior Brand Manager
- IT Director

Voice of the Customer – We aim to…

1. Reduce overall pharmacy spend
2. Digitalize the *procure-to-pay* process with pharmaceutical companies engaged in direct purchases
3. Reduce late payments which accrue financial penalties

Voice of the Partner – We aim to…

1. Ensure maximum customer satisfaction and predictability in managing accounts receivable
2. Acquire real-time customer demand signals to enhance production planning
3. Build and support new channel models

MINT for Digital Commerce

Integrate-Once™ for:

- Price/Sales Catalog
- Purchase Order
- PO Acknowledgement
- Advance Ship Notice
- Invoice
- Remittance Advice
- Return Authorization/Notification
- Credit/Debit Adjustment
- Product Activity
- Forecast Planning Schedule / Response

- Dispenser Inventory
- eCommerce

The Benefits of Digital Commerce Orchestration

Use Case	Benefits of Orchestration
Order Collaboration & Monitoring • PO / PO Ack • Advance Ship Notice • Invoice • Remittance Advice • Returns Authorization • Credit/Debit Adjustment	• Improve **planning accuracy** with real-time confirmation of PO quantities and due dates • **Reduce work** in managing purchase orders, enabling greater flexibility in order size and frequency to improve **supply chain agility** • **Improve timeliness and accuracy** of procure-to-pay and financial reconciliation processes
Demand Planning • Product Activity • Forecast Planning Schedule	• Ensure alignment with suppliers to improve **planning agility** and **reduce late or missed shipment**s • Improve collaboration on forecasts, **increasing predictability** and **reliability** of supplier deliveries while reducing safety stock inventory • **Reduce risk of out-of-stocks** and product delays through improved planning based on demand and inventory visibility • Enter into new **collaborative commercial channel relationships** such as ecommerce, vendor management inventory (VMI) to create win-win for both parties

Call to Action

- Share your feedback on these use cases and how it applies to your business
- Schedule a meeting with your TraceLink account executive to discover how MINT can help with other unique and emerging use cases
- Stop by the Product and Solution Fair to see MINT live.