2019 23rd Annual 3PL Study

October 2018
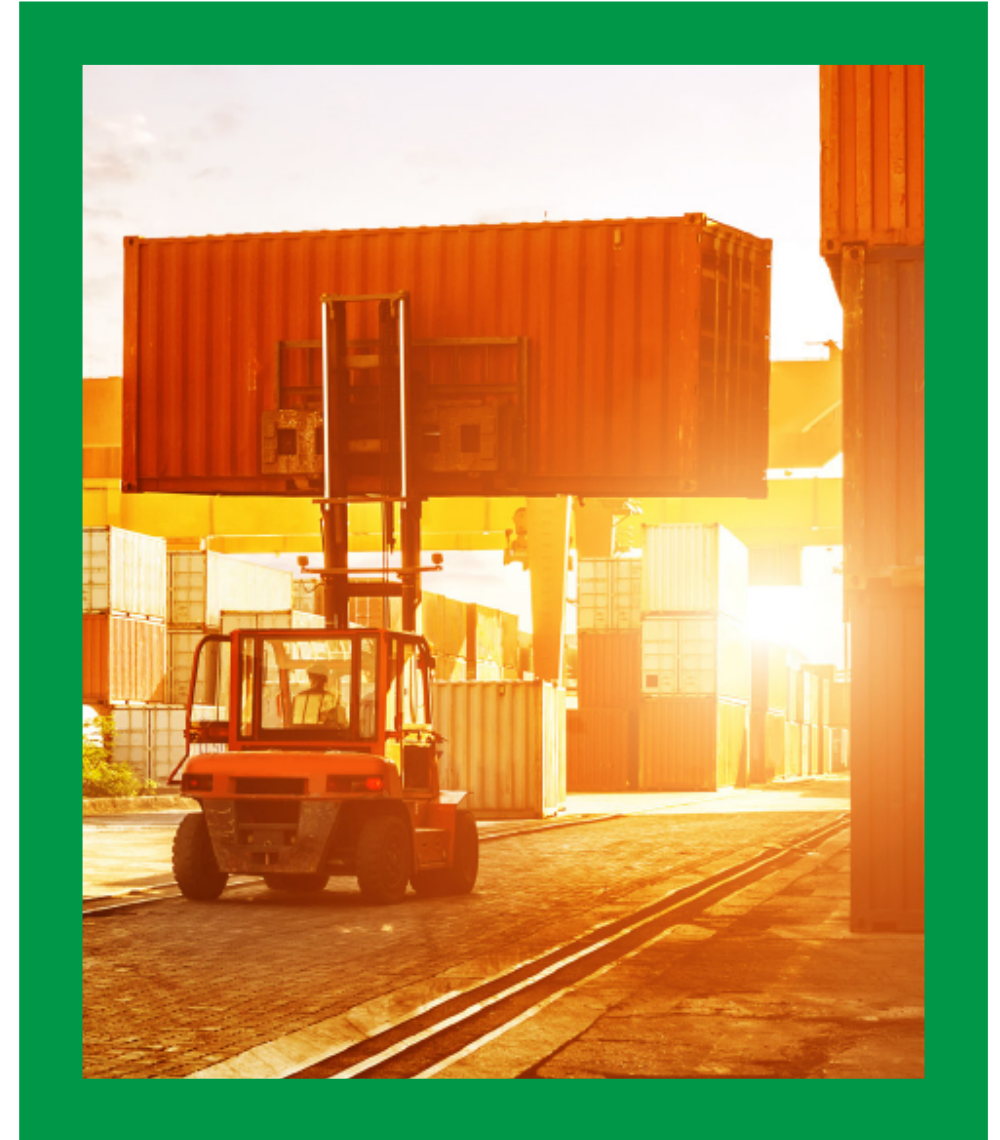
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  - The Last Yard
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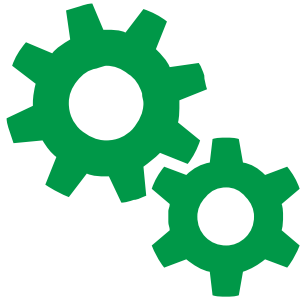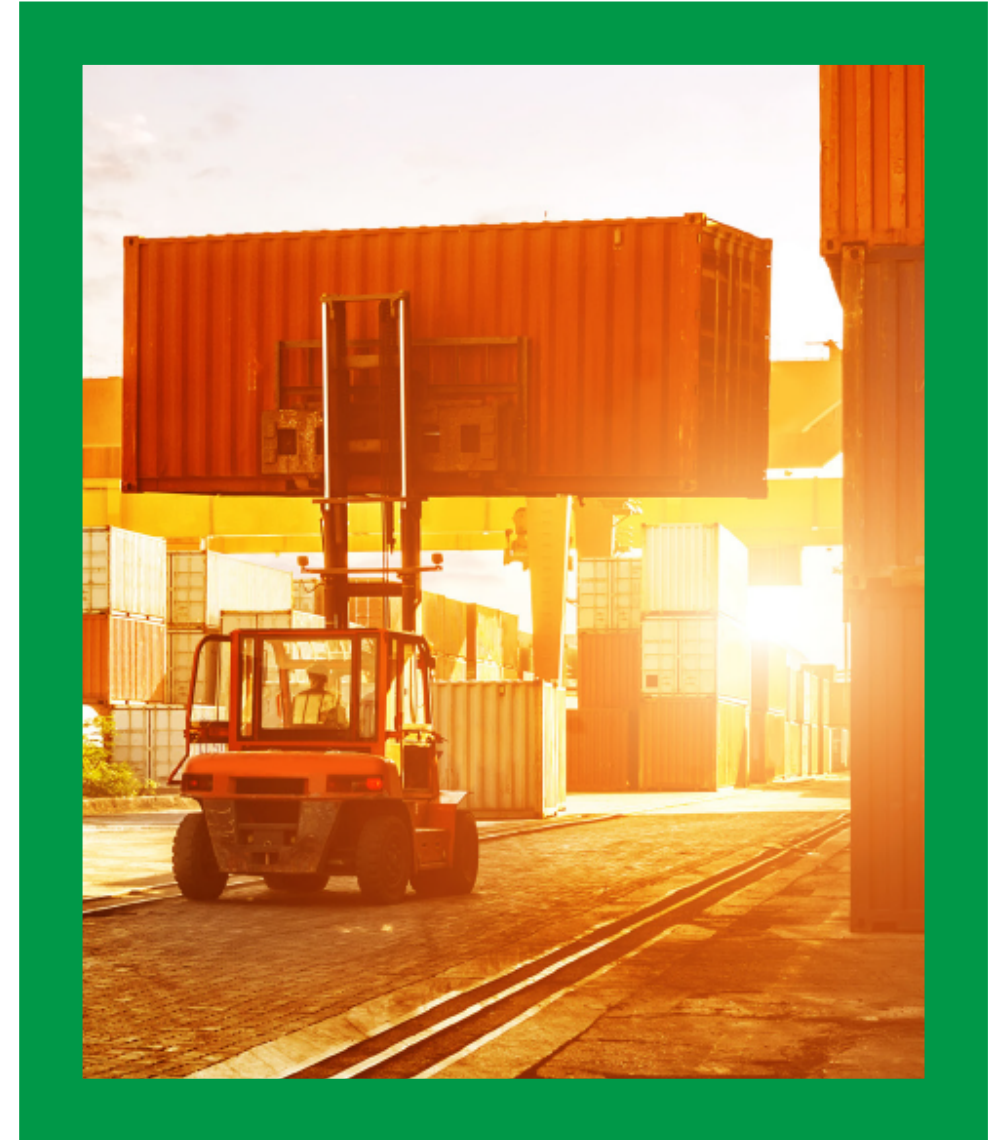 - 3PL-Shipper Data Sharing

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2019 23rd Annual 3PL Study – Major Research Thrusts

Customer Study

- E-mail Survey
  - Shippers
  - 3PL/4PLs
- Global
- Major Industry Verticals

Special Topics

- Leading Research
  - Industry
  - Infosys Research
- Key Industry Experts

Facilitated Discussions

- Workshops
- Roundtables
- Focus Interviews

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"Special Topics" Featured in Recent Annual 3PL Studies

2012
- Emerging Markets
- Electronics
- Talent Management

2013
- Supply Chain Innovation
- Supply Chain Disruption
- IT Gap
- Talent Management

2014
- Preferential Sourcing
- Smart Growth
- Big Data
- Growth and 3PL Relationships

2015
- Omni-Channel
- Strategic Workforce Planning
- CRM and Cloud
- Business in Mexico

2016
- 3PL Competitive Landscape
- Labor Shortage
- Multi-Enterprise Relationships

2017
- Logistics Service Providers: Decision Time
- 3PL Roles in Supply Chain Transformation
- Utilizing Big Data and Analytics
- End-of-Life Supply Chain

2018
- Blockchain for Supply Chain
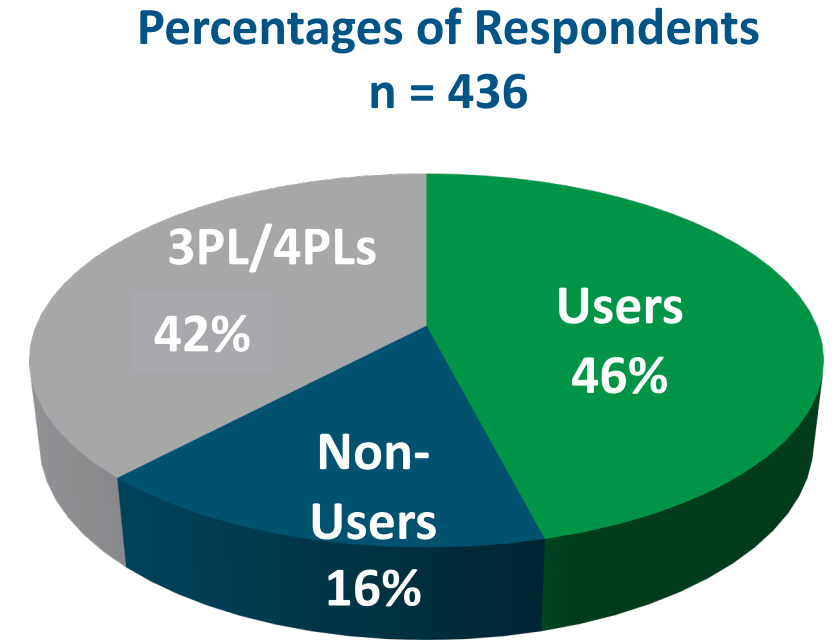- Automation/Digitization in Transportation
- Risk/Resilience in Shipper-3PL Relationships
- Logistics Talent Revolution

2019
- Keeping the Supply Chain Alive and Nimble
- The Last Yard
- Omni-Channel Revisited
- Dealing with Disruption Revisited
- Shipper-3PL Data Sharing

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The 2019 study includes both users and providers of outsourced logistics services
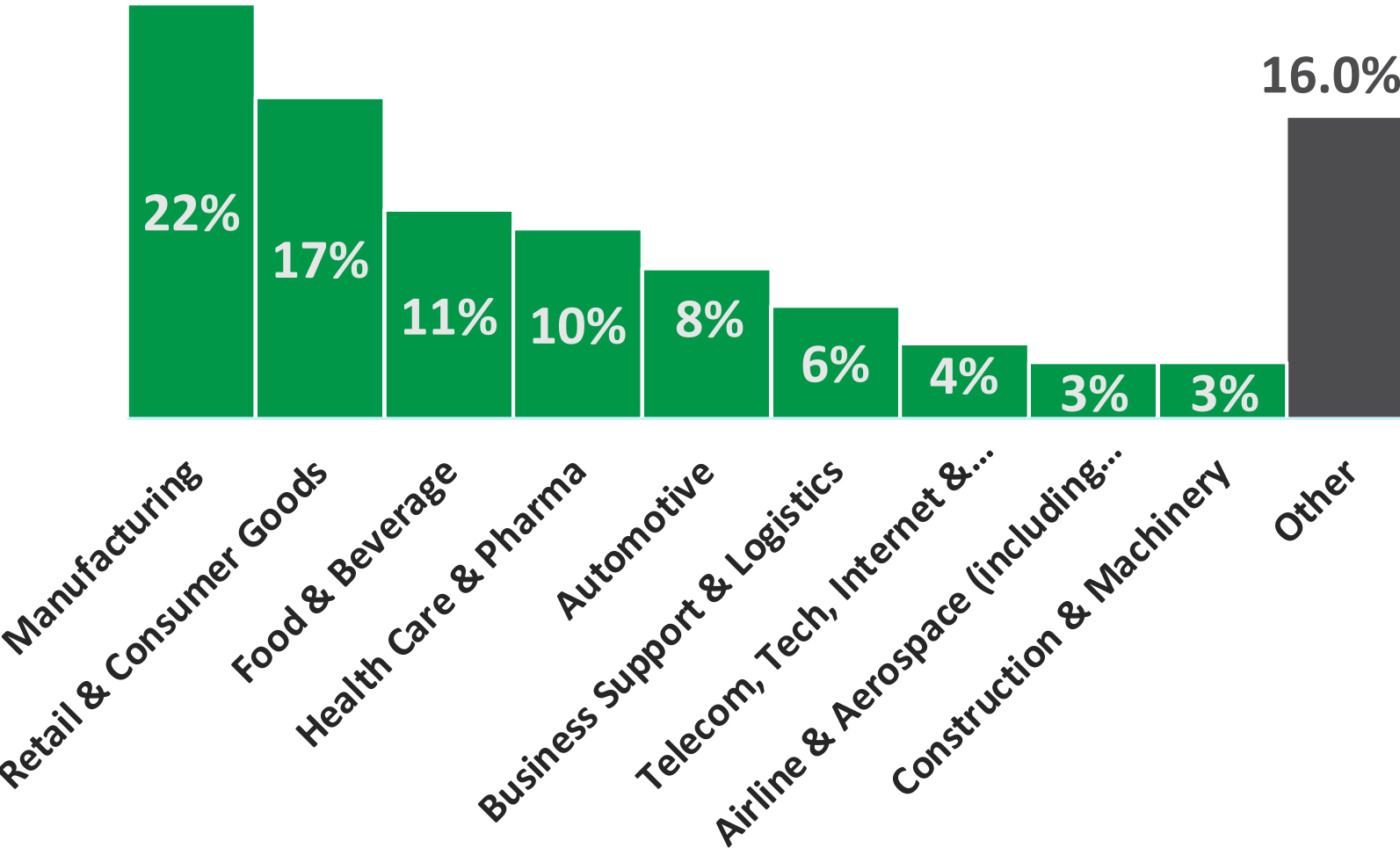
Bar chart:
- Manufacturing: 22%
- Retail & Consumer Goods: 17%
- Food & Beverage: 11%
- Health Care & Pharma: 10%
- Automotive: 8%
- Business Support & Logistics: 6%
- Telecom, Tech, Internet &...: 4%
- Airline & Aerospace (including...): 3%
- Construction & Machinery: 3%
- Other: 16.0%

Percentages of Respondents
n = 436

Pie chart:
- 3PL/4PLs 42%
- Users 46%
- Non-Users 16%

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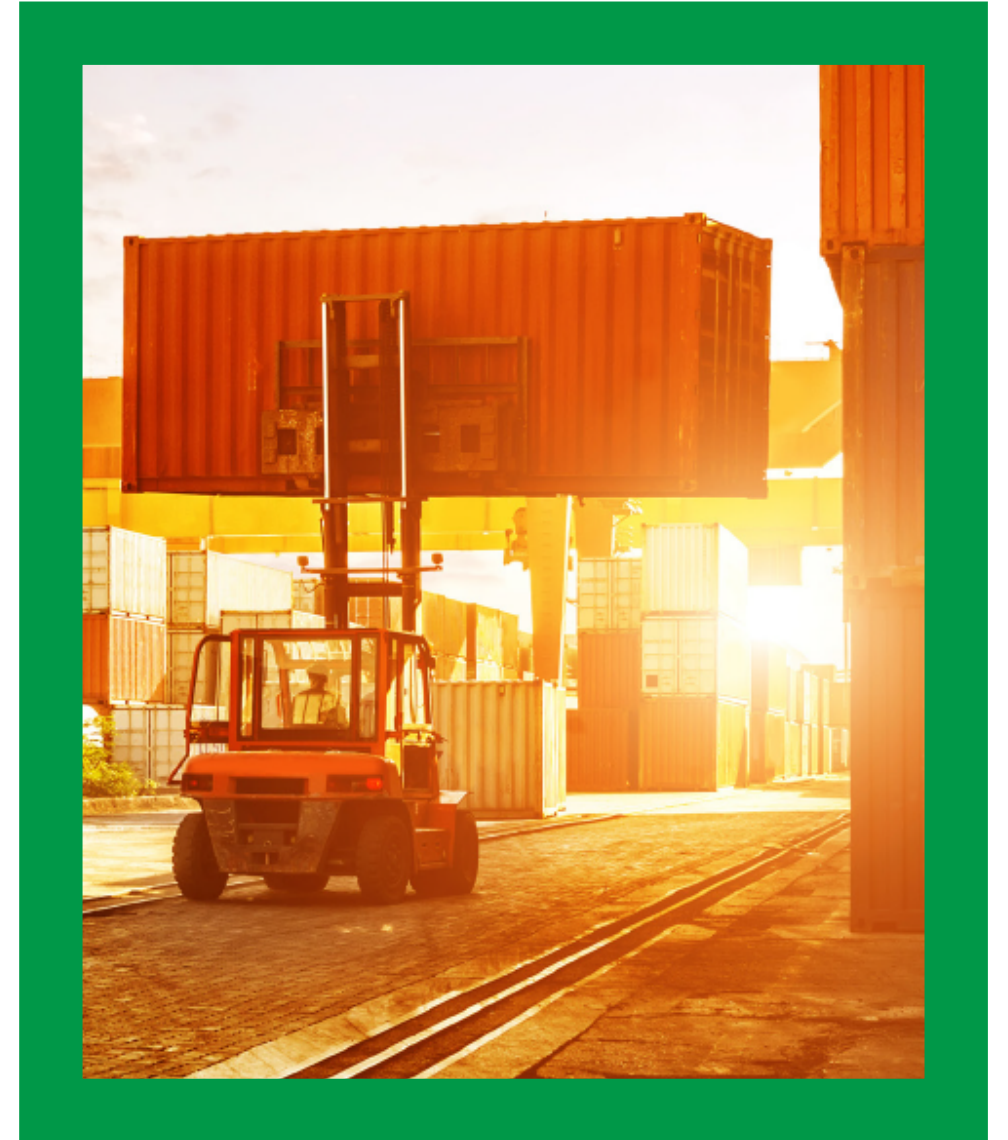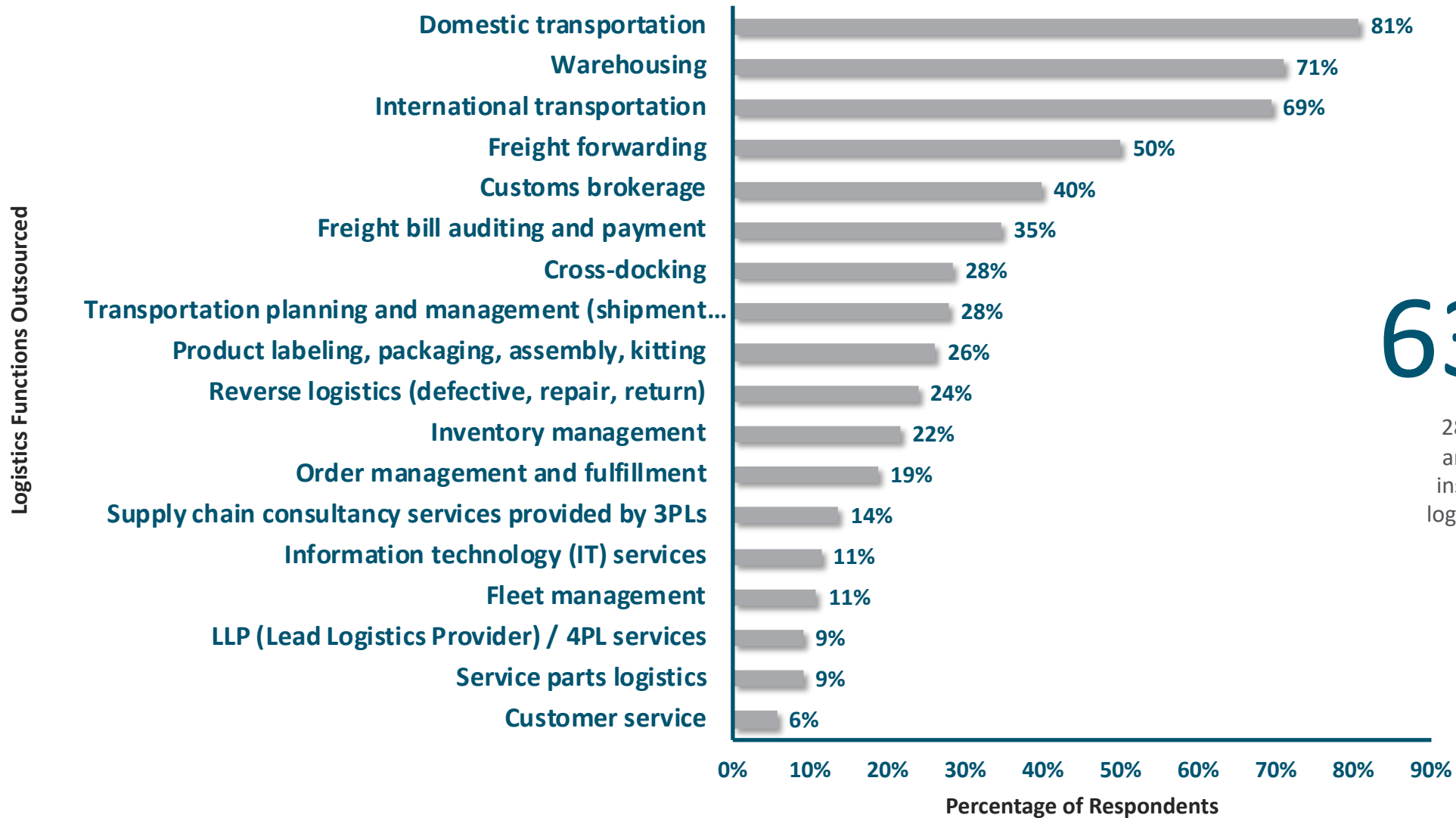 - Dealing with Disruption
  - 3PL-Shipper Data Sharing

Shippers currently outsource a wide variety of logistics services

Logistics Functions Outsourced

Logistics Function	Percentage of Respondents
Domestic transportation	81%
Warehousing	71%
International transportation	69%
Freight forwarding	50%
Customs brokerage	40%
Freight bill auditing and payment	35%
Cross-docking	28%
Transportation planning and management (shipment…	28%
Product labeling, packaging, assembly, kitting	26%
Reverse logistics (defective, repair, return)	24%
Inventory management	22%
Order management and fulfillment	19%
Supply chain consultancy services provided by 3PLs	14%
Information technology (IT) services	11%
Fleet management	11%
LLP (Lead Logistics Provider) / 4PL services	9%
Service parts logistics	9%
Customer service	6%

Percentage of Respondents

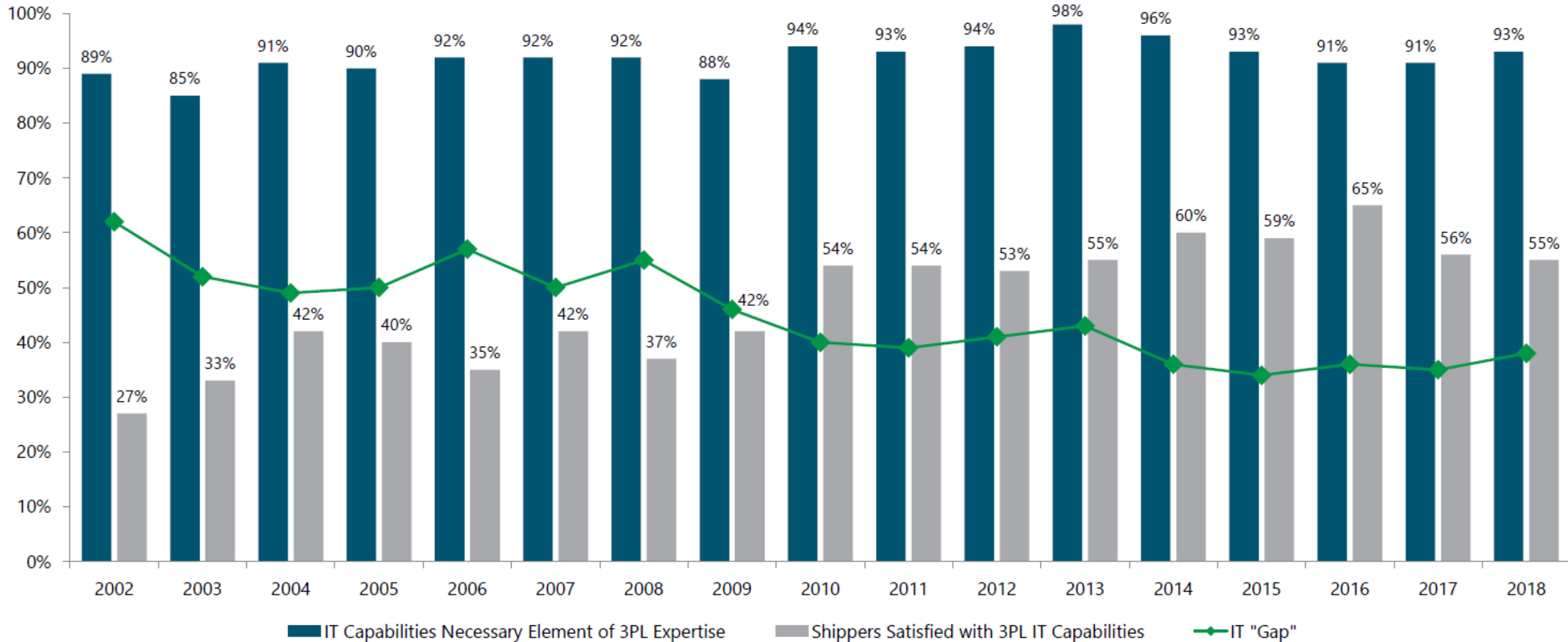**63%** Of shippers are increasing their use of outsourcing this year

28% of shippers are returning to insourcing many logistics activities **28%**

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The "IT Gap" is showing potential stability

IT Capabilities Necessary Element of 3PL Expertise | Shippers Satisfied with 3PL IT Capabilities | IT "Gap"

Workforce issues are critical both for managing cost and improving service and productivity

Top 5 Workforce Issues

Attracting talent	59%
Developing leaders	48%
Retaining high performers	40%
Enhancing employee motivation and engagement	38%
Enhancing workforce performance	37%

Largest projected wage Increase per worker by 2030 by country
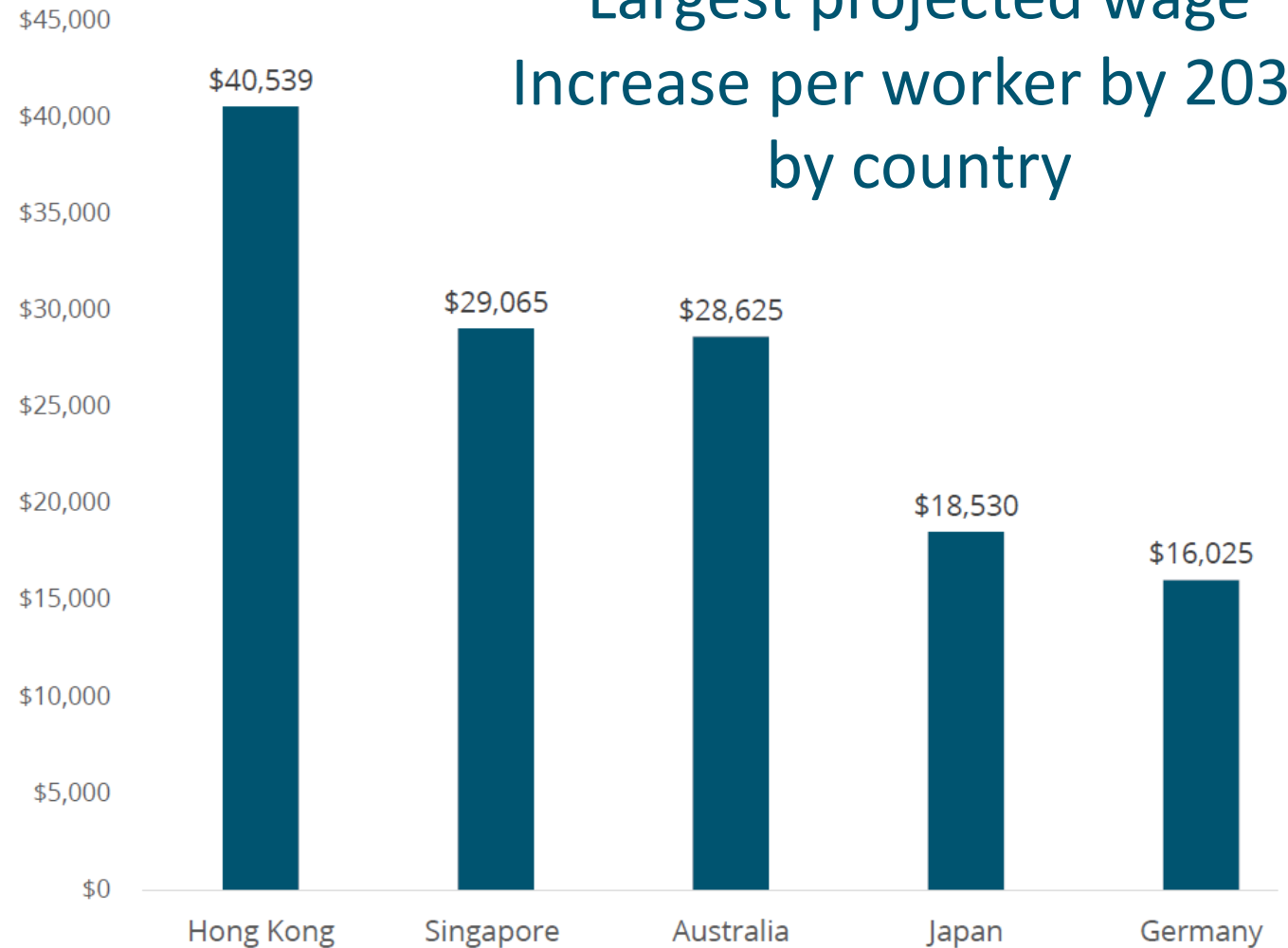
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Both 3PLs and Shippers are missing key talent at all levels

■ Percent Shippers Agree   ■ Percent 3PLs Agree

63% 64% 72% 60% 42% 48%

Our organization has the needed executive level talent in order reexamine our supply chain design

Our organization has the needed mid-level talent in order re-examine our supply chain design.

Our organization has the needed hourly or entry talent in order reexamine our supply chain design

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Shippers and 3PLs are aligned on "Top reasons why businesses re-examine their supply chains"

Shippers

3PLs

SHIPPERS	
RANK	CATEGORY
1	Lower overall operating cost
2	Competitive advantage
3	Closer to point of product consumption
4	Reduced freight transport time
5	Lower wage cost
6	Risk management
7	Closer to supply sources
8	Tariff/tax incentive
9	Exchange rate

3PLS	
RANK	CATEGORY
1	Lower overall operating cost
2	Competitive advantage
3	Closer to point of consumption
4	Lower wage cost
5	Reduced freight transport time
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8	Tariff/tax incentive
9	Exchange rate

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Although most shippers understand the need for agility, fewer than half have increased their inherent agility

Response	Percentage
None – did not change supply base for nimbleness	6%
Moved production closer to customers in order to reduce lead-time and improve flexibility	9%
Decreased supply chain nimbleness to reduce costs	15%
Other/Don't know	15%
Kept production offshore but realigned to suppliers that offered improved flexibility to change production volumes or products	17%
Moved production from local suppliers to offshore suppliers that offer more flexibility to change production volumes or products	39%

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Investment priorities for manufacturing and Supply Chain industry

2018

- Use of Industry Clouds, Blockchain, and Cognitive will be in use for 1/3 of Manufacturers, enabling the iterative rebalancing of critical supply based on capabilities rather than units and quantity

2019

- 80% of Supply Chain Interactions will happen across Cloud-Based Commerce Networks, improving resiliency and reducing the impact of Supply Disruptions by up to 1/3

2020

- 60% of G2000 Manufacturers will rely on digital platforms that enhance their investments in ecosystems and experiences and support as much as 30% of the overall revenue
- Smart postponement techniques and Additive Manufacturing will have been deployed by 1/3 of manufacturers. reducing delivery latency by up to 50%

2018

- ½ of Manufacturers will be using Analytics, IoT, and Social Collaboration tools to extend the Integrated Planning Process across the entire enterprise, in real time

2019

- Robots will be in use in 50% of Fulfillment Centers, resulting in productivity gains of up 30% and helping drive down the cost of operations and offset an increasing shortage of labor
- Cybersecurity will have surpassed physical security as a top concern for ½ all manufacturers, and in the transition to digitally enabled, cognitive supply chains, Cybersecurity will have become a top investment priority

2021

- 60% of Manufacturers will be leveraging an advanced analytics-driven data aggregation platform for supply chain operational data to improve the speed and accuracy of the fulfillment process
- 1/3 of manufacturers and retailers will be tracking goods using Blockchain in anticipation of regulatory changes, resulting in an improvement in delivered product quality of up to 20%.

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In the B2B space we have seen the following Last Yard innovations...

Technology

Example or Use Case

In-Store Logistics Services - Apparel
Inspection, specialized kitting services, price ticket changing, labeling, apparel security tagging, garment on hangers (GOH), Acceptance Quality Limit (AQL)

Apparel Logistics Group – APL Logistics
In order to meet the ever-changing apparel requirements, Apparel Logistics Group offers **apparel value added services** that are specific to fashion and the apparel market.

Sequencing & Kanban Delivery
3PLs offer sequencing to their customers (in manufacturing space) who need a more detailed product delivery schedule

DHL
Covers movements within the manufacturing plant of raw materials, components and sub-assemblies - either to or from stocking points or line-sides, for turning into finished goods

Customization and Postponement
Undertake customization activities during transit or at the last stage of the supply chain

DHL
Customizes products at its distribution center to enable choice of embroidered logos on apparel or personalized prints on the merchandise

In the B2C space we have seen the following Last Yard innovations...

Technology	Example or Use Case

Pre-Delivery Inspection and Repair
Aimed at providing the finishing touch to the brands for the consumers

Schneider
If a product is shipped with missing or damaged parts, Schneider's Medic service (for Furniture and appliances) makes repairs before delivery

Home Try-on Services
Order and try on clothes WITHOUT payment, paying only after a 7 day window to return undesired products passes

Amazon and Stitch Fix
Receive orders of clothes (up to 15 items for Amazon) without payment, limited period of time to determine what to keep and place undesired items in a pre labeled box

In-Home Delivery and Placement
Placing perishable goods or other goods in the required spot and not just on the doorstep or in the house

Walmart
This service will also include online grocery orders, which won't just be placed inside the house like the packages, but may be put away in the fridge and freezer, as needed

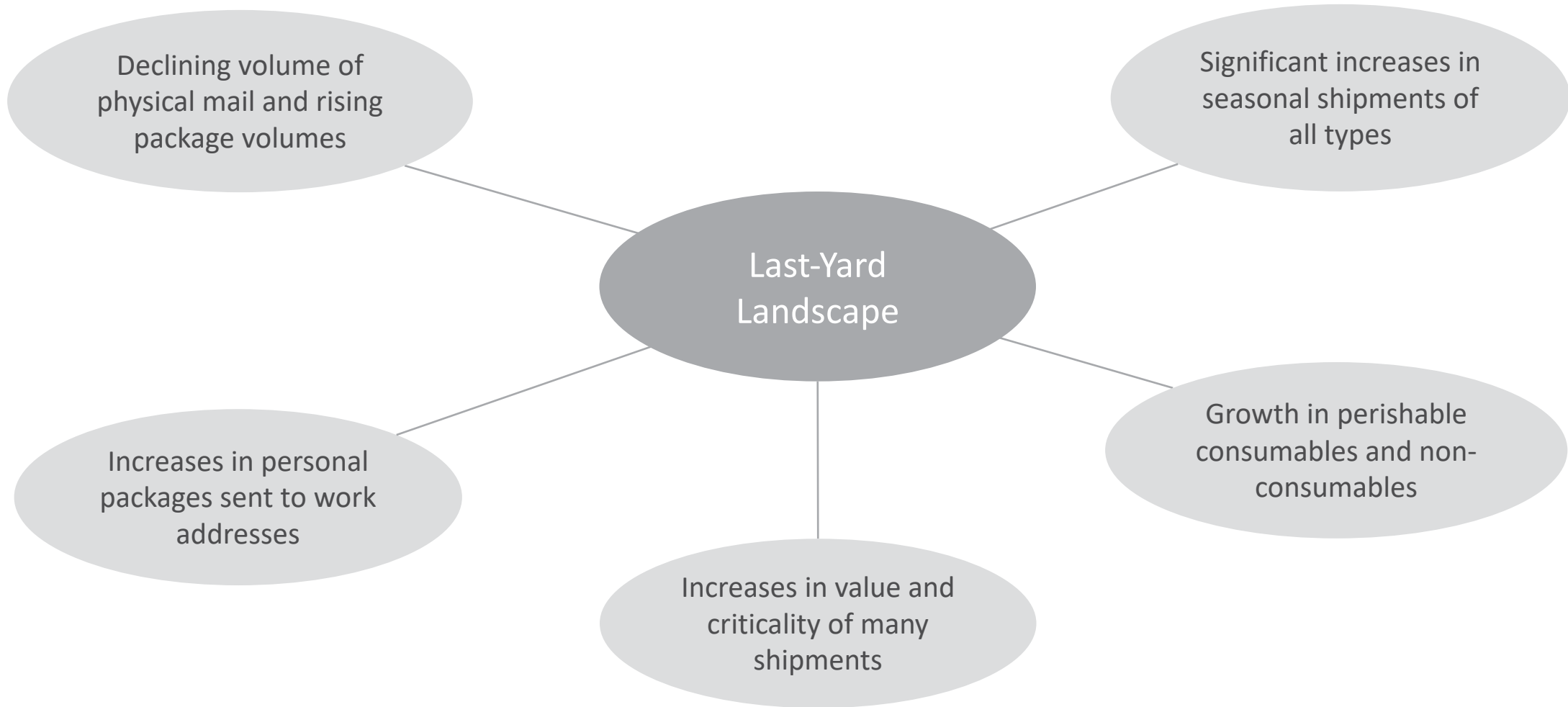PennState Smeal College of Business   Infosys CONSULTING   PENSKE Rental | Leasing | Logistics   KORN FERRY

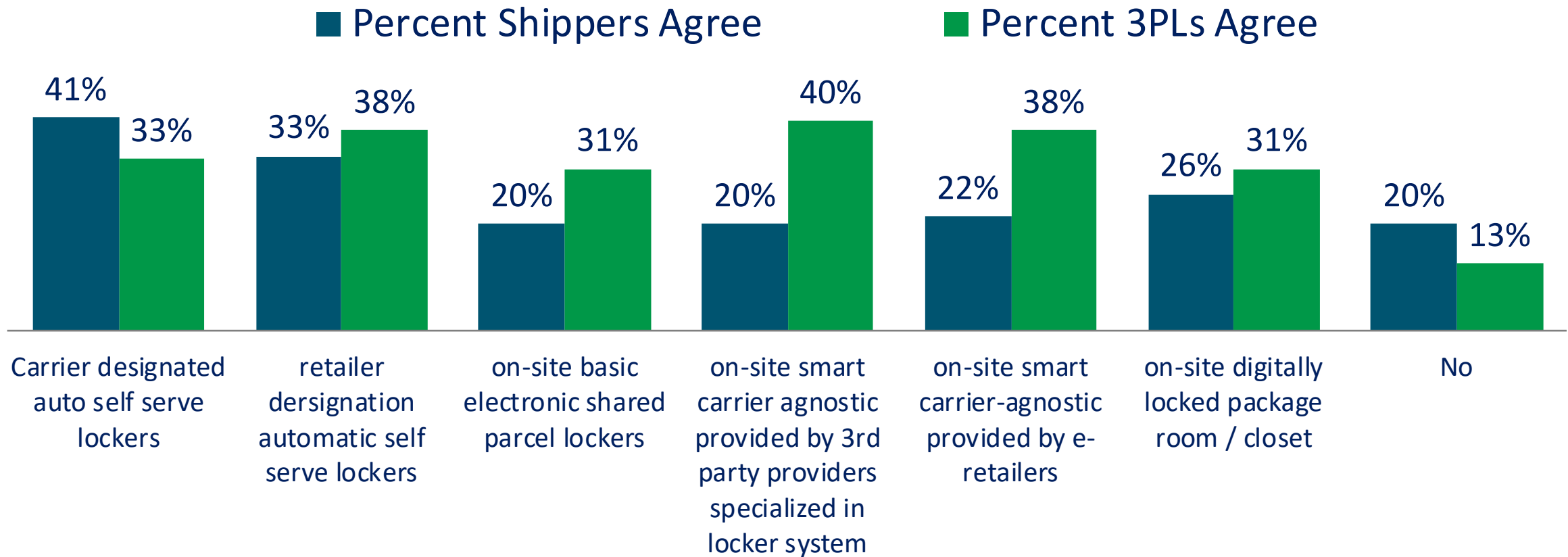# Shippers and 3PLs disagree regarding how well shippers manage last yard logistics

Percent Shippers Agree

Category	Percent
Delayed deliveries	72%
Damaged deliveries	66%
Misplaced deliveries	52%
Lost deliveries	49%
Inefficient package receiving and processing	47%
Package storage capacity constraint	43%
Lack of special accommodation capability	35%

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Key trends driving changes in the last-yard logistics landscape

Declining volume of physical mail and rising package volumes

Significant increases in seasonal shipments of all types

Last-Yard Landscape

Increases in personal packages sent to work addresses

Growth in perishable consumables and non-consumables

Increases in value and criticality of many shipments

3PLs are leading the way as it pertains to the "self serve" model

"Self-serve" models are increasingly viewed as effective solutions for last yard logistics. Please indicate whether your organization is likely to provide or engage in partnerships to provide the listed varieties of this model
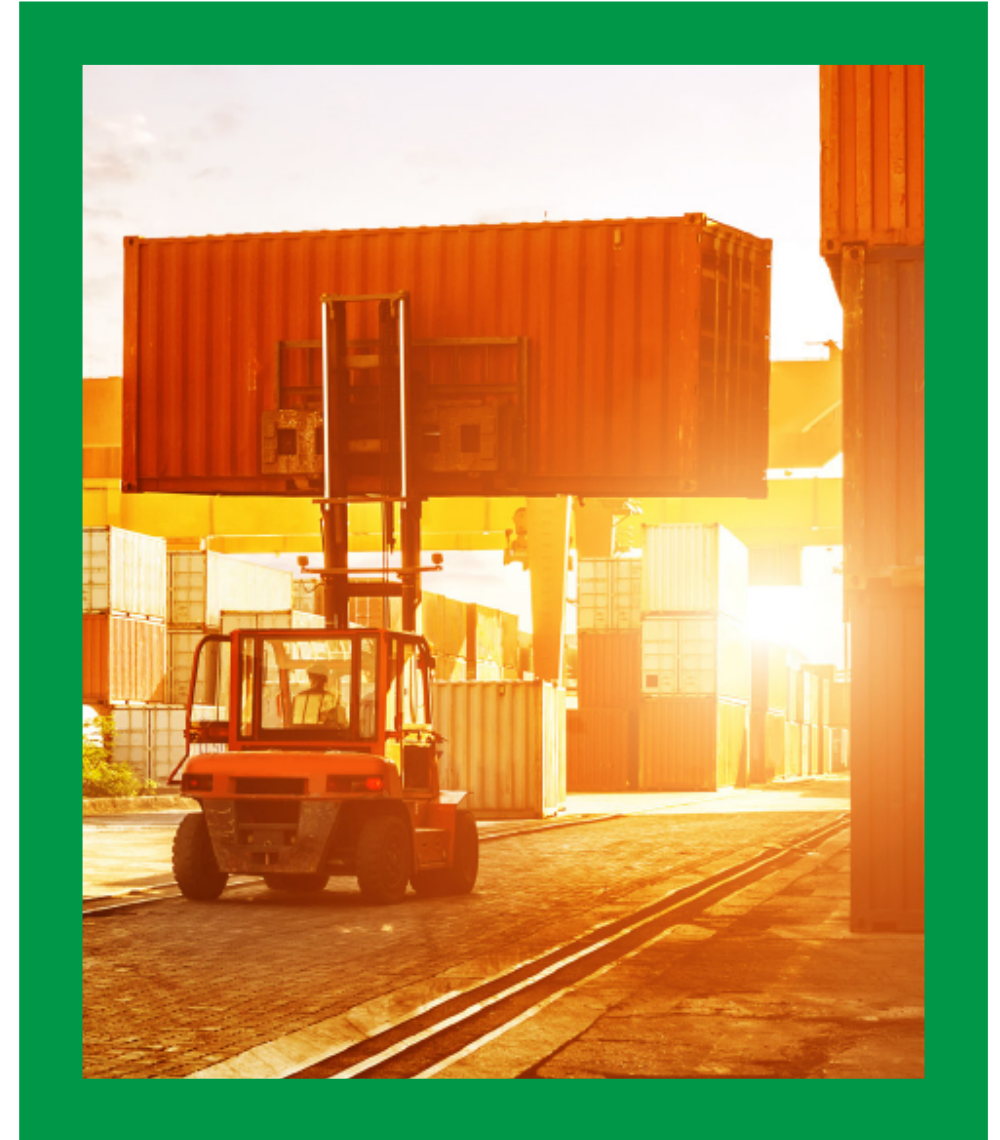
■ Percent Shippers Agree   ■ Percent 3PLs Agree

Category	Percent Shippers Agree	Percent 3PLs Agree
Carrier designated auto self serve lockers	41%	33%
retailer dersignation automatic self serve lockers	33%	38%
on-site basic electronic shared parcel lockers	20%	31%
on-site smart carrier agnostic provided by 3rd party providers specialized in locker system	20%	40%
on-site smart carrier-agnostic provided by e-retailers	22%	38%
on-site digitally locked package room / closet	26%	31%
No	20%	13%

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Interest is high amongst several receiving and tracking systems

Of the automation systems, tools, and functionalities listed below, please indicate which represent likely opportunities for your organization to become involved
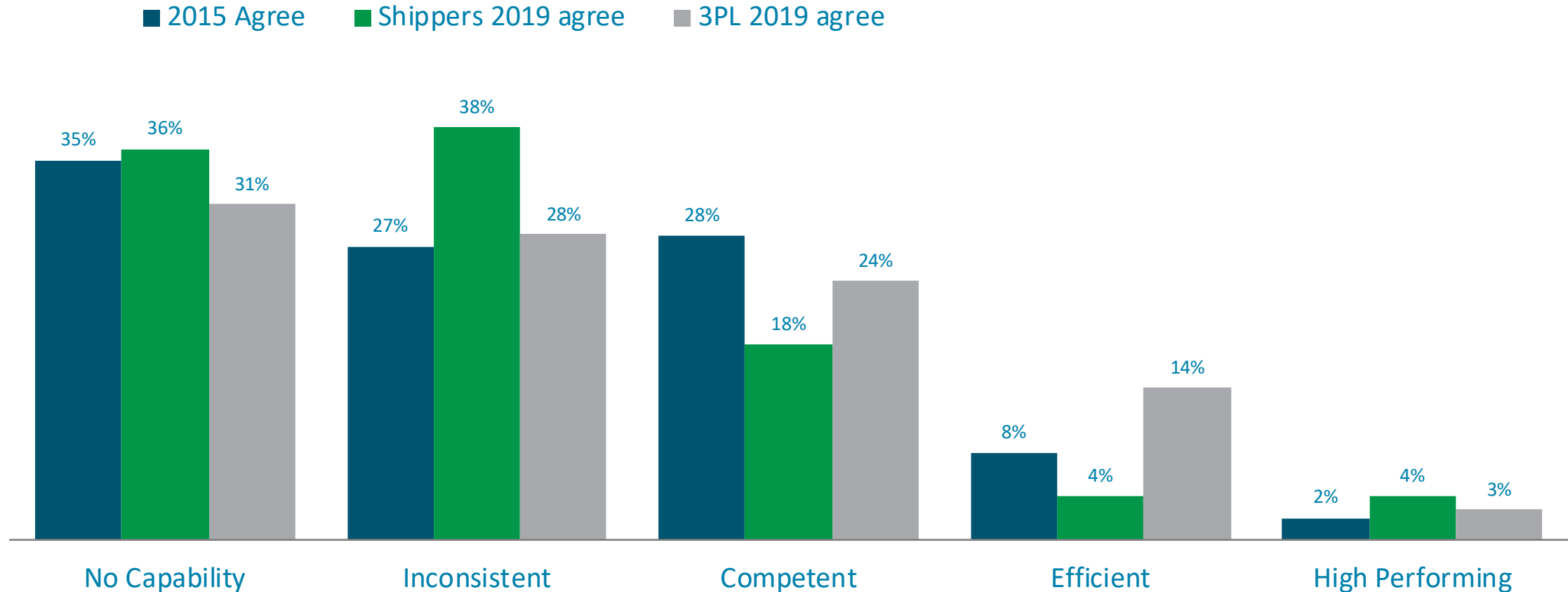

■ Percent Shippers Agree   ■ Percent 3PLs Agree

Category	Percent Shippers Agree	Percent 3PLs Agree
On-premise package receiving and tracking software solutions	35%	22%
Hosted package receiving and tracking software solutions	24%	20%
SaaS based package receiving and tracking software solutions	42%	52%
Handheld or portable scanning devices	54%	63%
Wireless belt printers to create barcode labels for interal use	30%	27%
Smartphones and tablets running Android or iOS	51%	64%
Automatic electronic notification	51%	48%
Automated internal delivery routing	32%	28%
PoD digital signature collection	61%	66%
None	4%	5%

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How prepared do you think your organization is to handle Omni-channel retailing? 2015 vs 2019

■ 2015 Agree   ■ Shippers 2019 agree   ■ 3PL 2019 agree

	No Capability	Inconsistent	Competent	Efficient	High Performing
2015 Agree	35%	27%	28%	8%	2%
Shippers 2019 agree	36%	38%	18%	4%	4%
3PL 2019 agree	31%	28%	24%	14%	3%

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Omni-Channel Trends

Trend	Example or Use Case

Trend · **Example or Use Case**

The Rebirth of Brick & Mortar
Online ("pureplay") merchants are growing their physical footprint as consumers continue to place a premium on both the versatility and depth of online shopping and the convenience of buying, picking up and returning items locally.

Frank and Oak
Online menswear brand **Frank And Oak** has opened 16 physical stores in North America. The in-store experience includes premium coffee and barbershop services

The Consumerization of B2B
Changing B2B Buyers' expectations are pushing the need for B2C-like functionalities.

Amazon
In October 2017, Amazon launched Business Prime shipping, a paid annual membership program for businesses in the US and Germany

Reaching Peak Browser
In an IoT world, dependence on browsers will wane. Mixed in with mobile apps, AR, and voice interactions, the browser will become one channel among many and no longer the *de facto* means by which we purchase products or services digitally.

Kwik one tap smart button and delivery service
Similar to Amazon dash but with an open ecosystem that allows users to choose: brand, retailer, payments processor, and delivery type

Measuring Digital Success
The tools to measure a retailer's ROPO ratio – the in-store impact of digital campaigns and investments – are now more advanced and about to become more accessible to retailers.

New Metrics and Analysis Methods
By combining mobile devices and payment, social media, geolocation / mobile tracking, real-time inventory with advanced analytics tools, ERP, CRM and POS systems, retailers will know which dollars led to in-store purchases thereby determining ROPO Ratios (Research Online, Purchase Offline)

Value Added Services

Increasing the Scope of Home Delivery

- Home delivery is the most typical method of delivery for online purchases, and the omni-channel aims to solve the only problem for e-tailers i.e. having no direct contact with the customer

- Delivery courier could provide additional value-added services to improve the customer experience – for example:
  - Installing the delivered product on behalf of the e-tailer
  - Aiding in identifying upselling opportunities
  - Facilitating product returns by immediately (or at an agreed date and time) taking back unfit-for-purpose products

Customization and Postponement

- Customers want both speedy delivery more product customization and personalization

- The solution is to undertake customization activities during transit or at the last stage of the supply chain

- Customization and postponement services done at the DC have been increasing in skill level. Examples include technical inspection, rework services, consolidation, final assembly, and product customization

- Customization is also undertaken during transit – Manufacturing companies are creating modular designs to build much greater flexibility into their demand forecasts and enable manufacturing to be located as close as possible to the customer
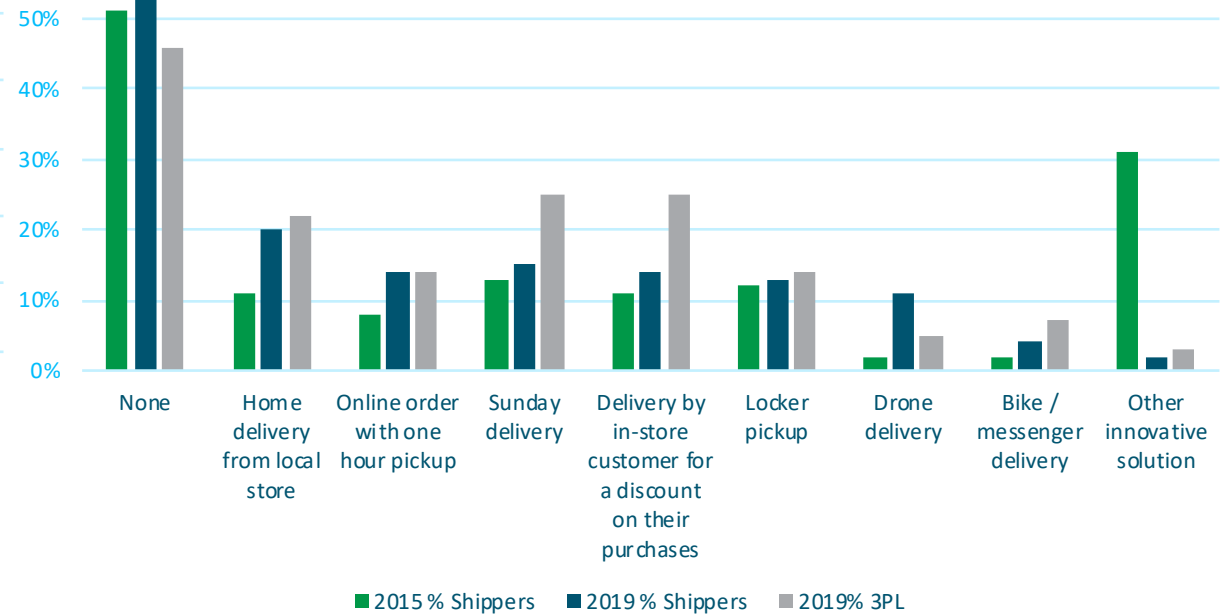
Enabling Seamless Returns Logistics

- A high percentage of purchases are returned in omni-channel and e-commerce models, therefore, it becomes important for e-tailers to offer a hassle-free, convenient and seamless returns process to attract online customers

- Anytime, anywhere returns are facilitated by allowing customers to bring back the product to any store, have it collected from home, or use any of the various drop-off methods (including parcel lockers, parcel boxes and car trunks)

- Logistics providers today provide on-site or in-warehouse evaluation of returns and advise the retailer or manufacturer on the best course of action

2015 vs 2019 fulfillment priorities and strategies

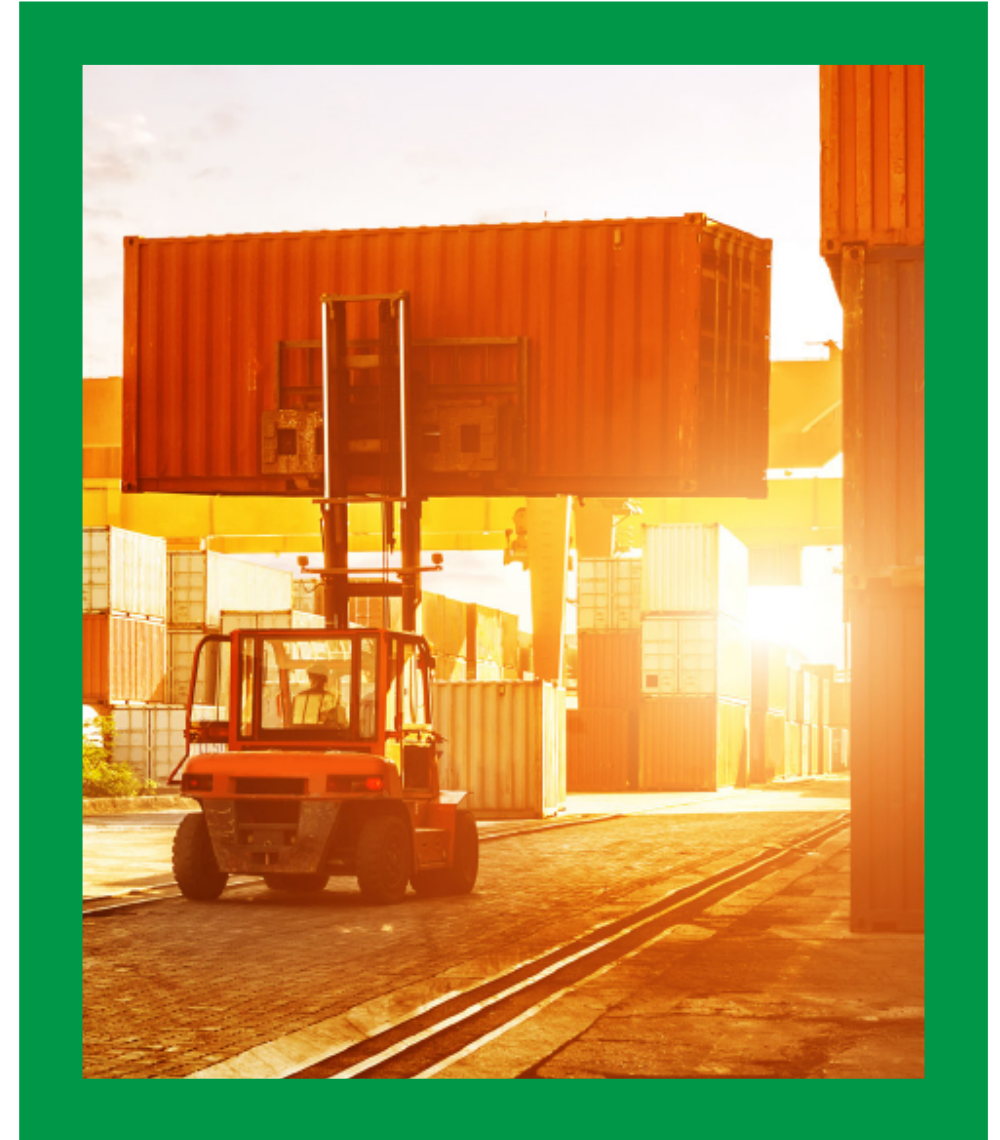**What is your priority in Omni-channel fulfillment? 2015 vs 2019**

Legend: ■ 2015 % Shippers ■ 2019 % Shippers ■ 3PL
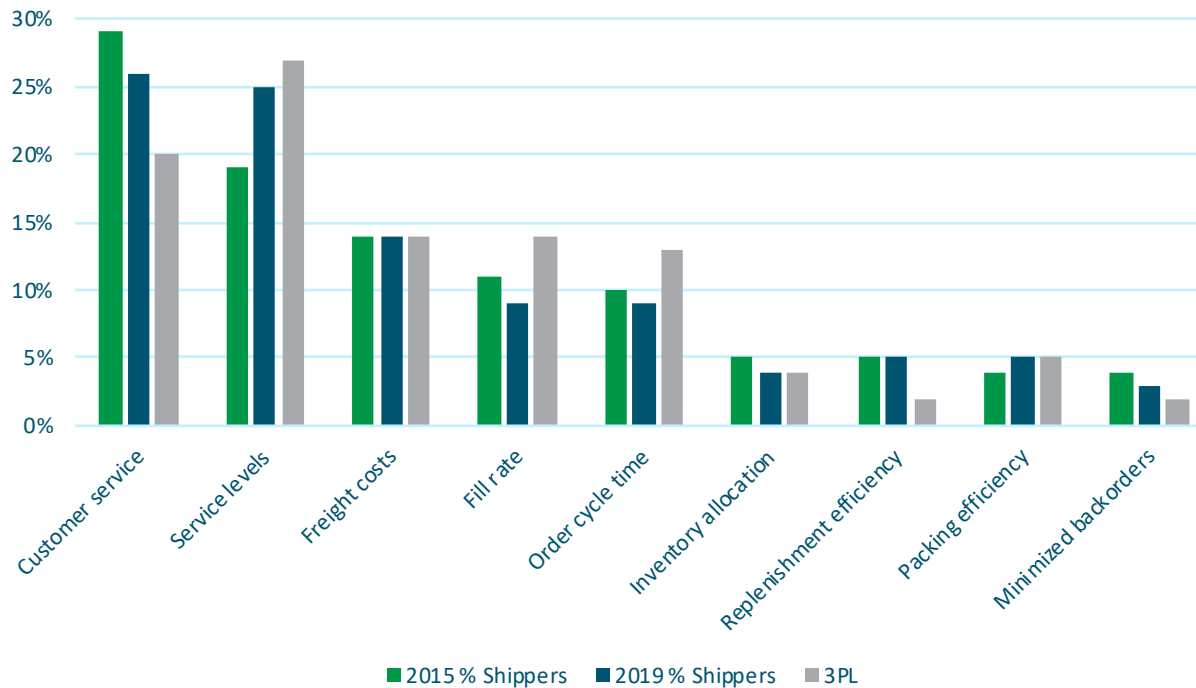
Which of the following fulfillment strategies are you utilizing / piloting / considering? 2015 vs 2019

Legend: ■ 2015 % Shippers ■ 2019 % Shippers ■ 2019% 3PL

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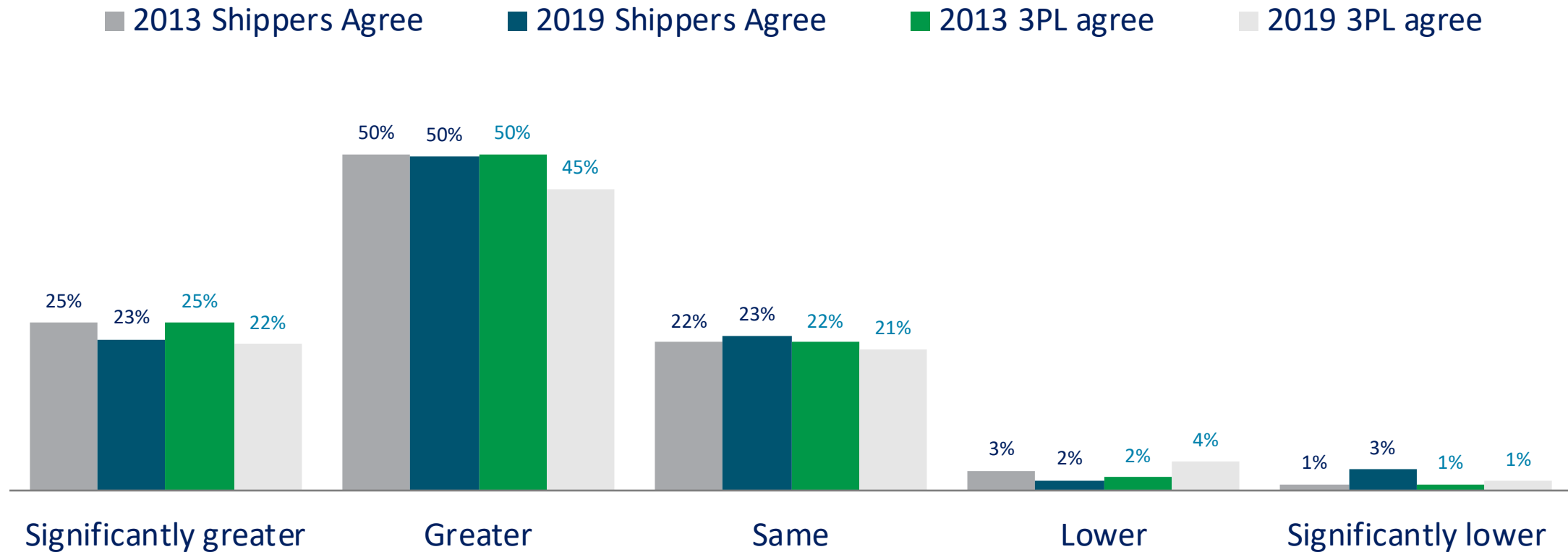PENSKE Rental | Leasing | Logistics

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Indicate the level of importance your organization puts on SC disruption mitigation / response compared to five years ago. 2013 vs 2019

Legend: ■ 2013 Shippers Agree ■ 2019 Shippers Agree ■ 2013 3PL agree ■ 2019 3PL agree

Significantly greater: 25%, 23%, 25%, 22%
Greater: 50%, 50%, 50%, 45%
Same: 22%, 23%, 22%, 21%
Lower: 3%, 2%, 2%, 4%
Significantly lower: 1%, 3%, 1%, 1%

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Indicate the top five tools / strategies that your organization currently utilizes to mitigate and manage supply chain disruptions

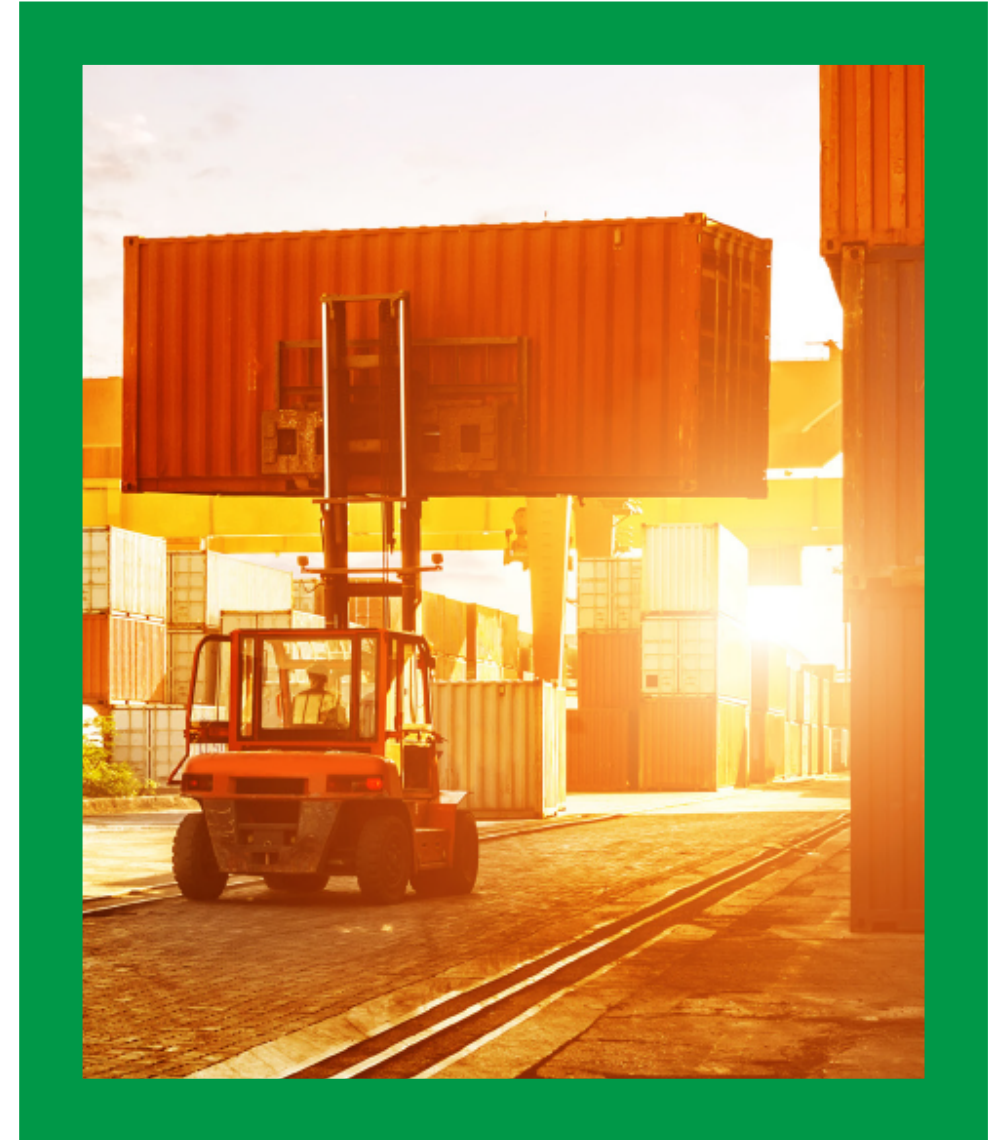| 2013 % SHIPPERS	2019 % SHIPPERS	CATEGORY
57%	61%	Supply chain visibility tools
69%	72%	Partnerships (e.g., strategic partners, 3PL, competitors)
62%	58%	Business continuity planning (e.g., redundant production, diversified supplier base)
49%	44%	Employee training / talent management/ internal and external certifications
31%	30%	Decision support tools (e.g., scenario planning)
33%	32%	Supply chain mapping
41%	41%	Advanced enterprise risk management organization (internal aurot, logistics)
28%	23%	Financial products including Insurance
44%	42%	Supplier score carding (stress testing, supplier codes of conduct)
13%	13%	Disruption news feeds
NA	17%	Predictive analytics

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Handling SC Disruption: Financial and Operational Hedging Strategies in Supply Chains

Financial →

← Operational

Commodity Futures & Forward Contracts

Reserves and Redundancy

Truck Lane Futures

Reducing / Eliminating Root Causes of Risk

Currency Swaps

Risk Sharing & Transfer

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Consequences of data sharing issues between 3PLs and Shippers

CONSEQUENCES	% Shippers	% 3PLs
A decline in shipper customer satisfaction	61%	54%
Shipper did not renew a 3PL's contract at conclusion of service	30%	16%
Late payment to the 3PL for services rendered	25%	38%
Negative word-of-mouth (other 3PLs learned about our experience)	23%	N/A
Contributed to a violation of a contractual service-level agreement requiring remediation	22%	22%
Negative word-of-mouth (other shippers learned about experiences)	17%	24%
Shipper terminated service before conclusion of contract	13%	12%

Keys for Successful Shipper-3PL Data Handoff

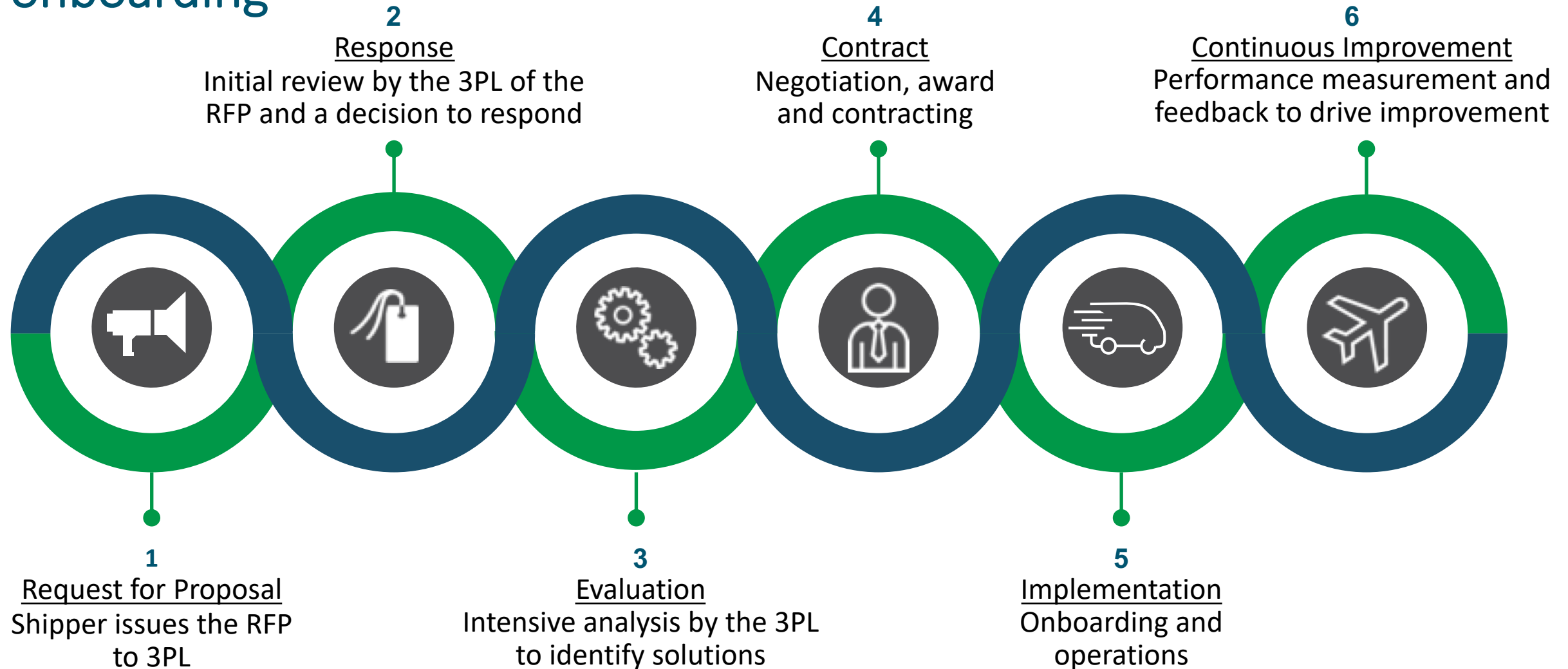**4 crucial elements for effective RFP**:
- Problem to Solve
- Complete Data
- True Assumptions
- Operational Insight

A meaningful RFP process is central to the development of the relationship

Both Shipper-3PL data handoffs **and** Internal 3PL functions are critical

Spreadsheets usage needs to evolve into more capable technologies

Example business process for carrier RFP 3PL response, award, and onboarding

2
Response
Initial review by the 3PL of the RFP and a decision to respond

4
Contract
Negotiation, award and contracting

6
Continuous Improvement
Performance measurement and feedback to drive improvement

1
Request for Proposal
Shipper issues the RFP to 3PL

3
Evaluation
Intensive analysis by the 3PL to identify solutions

5
Implementation
Onboarding and operations

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Thank You