See how making the transformation to an asset-light logistics network can make your business more efficient and faster than ever.

#XPLlogisticsfuture
“Customers are quickly becoming hyper-local segments of one, each with their unique requirements, behaviors, and preferences.”
Two years ago Joe, the head of logistics for a global manufacturer, was in a tight spot. Over the previous decade, he had built a solid, scalable, and repeatable supply chain to support the company’s complex business. This included handling two distinct flows:

**Sourcing** of materials the company uses to manufacture its products and highly seasonal finished goods that accompany finished products as promotional items.

**Delivery** of finished products to retail customers, the company’s own stores, and its warehouses that fulfill ecommerce demand.
But the company’s business was changing rapidly. With e-commerce exploding, the number of distribution channels had multiplied and order types and quantities were evolving as well.

Joe could no longer focus on just truckload shipments to a warehouse. Instead, he found himself increasingly dealing with smaller-quantity shipments and a variety of non-traditional delivery modes that were just as important to meeting customer demand (which often included expectations for same-day delivery). Joe knew he had to maintain and meet the requirements of the company’s traditional distribution channels as well as those of the new channels that look nothing like what the company was built to respond to. But how? He couldn’t simply continue to tweak the existing logistics network because the dynamics of the business demanded something completely different.

Joe eventually discovered his answer in the form of a new approach to logistics, fuelled by digital, that enabled him to transform his fixed network into a fluid, “intelligent” one. Today, working hand-in-hand with a new type of logistics services provider, Joe can leverage technologies such as analytics and artificial intelligence to know at a glance what demand and transportation capacity look like across the business anywhere in the world. He can craft strategies for moving product using both traditional 3PLs and a wide range of alternative transportation options that have become part of the company’s new service-provider ecosystem. And he can keep tabs on emerging vendors with promising new technologies or capabilities he could use to further improve his logistic network’s efficiency and responsiveness.

By introducing a revolution in how logistics operates, Joe has positioned his company to excel at a time when customer demands, channels, and delivery requirements are threatening the livelihoods of other established companies that are struggling to keep pace.
The struggle is real

Is Joe’s world a fantasy? His new one may sound like it to today’s logistics organizations, but his old one is something they certainly can identify with.

With strong consumer spending and steady economic growth, demand today is extremely high. But it’s also getting more difficult to control, as customer expectations continue to undergo rapid and extensive changes. According to supply chain leaders participating in Accenture Strategy’s Future of Supply Chain research, customers increasingly demand a wider selection (71 percent) of customized (76 percent), reliable (73 percent), and sustainable (69 percent) products delivered as rapidly as possible (76 percent).

In other words, customers are quickly becoming hyper-local segments of one, each with their unique requirements, behaviors, and preferences. And every one of these segments is vital to incremental growth, so they can’t be ignored.

71% of customers increasingly demand a wider selection of products.
Shippers are working hard to keep up.

But they keep hitting the wall in the form of familiar constraints: existing platforms, delivery systems, capabilities, and organization structure that are based on the “old” customer expectation of greatness. The “new” expectations, a symptom of today’s multichannel, digital world, are challenging these networks built to be hyper-productive in what was largely a traditional brick and mortar world. Worse, customer demand currently outstrips the supply of resources to fulfill it, leading to sky-rocketing logistics costs.

Shippers have tried to modify their operations through incremental improvements. But making more significant change is akin to turning operational battleships into jet skis—an effort that’s hindered by disparate processes that are not integrated across the supply chain, lack of operational visibility due to organizational silos, and limitations in technology and skills needed to drive the change. Transforming the battleship takes a lot of effort and money, not to mention time—which shippers today simply don’t have.
For many, the solution has been to turn over their logistics operations to a third-party logistics services provider (3PL). The problem is, traditional 3PLs also are falling behind. Their entire business has been built to satisfy the requirements of the traditional demand model—less personalized and more predictable—and is effectively incompatible (operationally and financially) with where their customers are headed. Yet 3PLs have been slow to make the strategic shifts in their own businesses to help shippers better serve their customers.

On top of it all, by outsourcing their logistics operations to gain a cost advantage and offload overhead costs, major shippers have effectively “hollowed out” their logistics and supply chain talent—effectively surrendering the talent development and innovation pipeline to 3PLs. Reversing that talent decline won’t be easy.

The upshot: Shippers are suffering a one-two punch of failing to consistently meet customers’ expectations while incurring rising costs inherent in their increasingly inefficient model. And many aren’t quite sure where to go from here.
What’s the answer?

Shifting to an “Asset-Light” Logistics Network.

The stark reality is that doing things better—i.e., continually improving on the existing logistics model—won’t cut it any longer. Gone are the days of offloading logistics to a 3PL and declaring victory. Companies should do something fundamentally different. But what? How do companies efficiently, effectively, and profitably meet the needs of an increasingly demanding and fragmented customer base when supply capacity is getting more difficult to find?

According to 79 percent of executives in Accenture Strategy’s study, the answer is to replace the traditional fixed network with a flexible, asset-light model. An asset-light model helps a company to serve multiple customer segments through multiple logistics networks that are based on shared assets and that leverage allies and digital tools to foster large-scale agility and responsiveness.

79% of executives believe that the answer is to replace the traditional fixed network with a flexible, asset-light model.
In an asset-light model, a shipper maintains its own core capabilities to meet the requirements of core customer segments. It then uses providers across its ecosystem to fulfill incremental demand from the segments of one that it can’t handle effectively or profitably by itself. These providers could be companies that come together to share resources and improve utilization for mutual benefits. They also could be third-party platforms that provide a particular service or capability—such as last-mile fulfillment, reverse logistics, crowd-sourced on-demand delivery, warehousing, and others that could be mobilized quickly to respond to unique demands. With the right kinds and number of providers, a shipper could theoretically activate thousands of different fulfillment networks at a moment’s notice when needed.
The asset-light model is compelling in its potential. But in practice, it can pose two big challenges: identifying the providers and capabilities that should be included in the ecosystem, and managing the execution of fulfillment across this diverse set of capabilities. That’s where XPL comes in.

XPL can be a broker of this new digitally based, highly collaborative new way to serve customers. It can connect the dots across the logistics network, creating and orchestrating an end-to-end solution that brings together the relevant providers and capabilities required to cost-efficiently provide highly personalized service down to the individual customer level.
XPL is the new operational mindset required for companies to excel in today’s age of continual disruption, which Accenture has dubbed Industry X.0—the digital reinvention of industry. In Industry X.0, “X” signals that change is no longer linear, and companies should identify the most effective combination of new technologies and processes to power their digital reinvention. Similarly, the “X” in XPL means the next step beyond 3PLs isn’t an incremental, linear change in logistics (4PL) but, rather, an x-factor-level of change, powered by new capabilities and technologies, that supports the broader company’s reinvention.

XPL can be a catalyst for logistics transformation by helping shippers identify and orchestrate the new ecosystem that underpins the asset-light model of the future.
Bring in new ecosystem partners with powerful new capabilities

In an XPL environment, traditional vendors can still be a part of the logistics ecosystem. However, shippers should broaden their ecosystem to include companies with innovative, disruptive technologies that can reshape key aspects of their logistics operations.
A great example is Breakthrough Fuel, which has fundamentally changed how shippers approach fuel surcharges. Breakthrough’s technology helps shippers to calculate a surcharge based on real-time fuel prices in the cities between which they’re actually shipping, rather than on the Department of Energy Index that’s calculated based on the average of fuel prices nationally. Carriers still get reimbursed for fuel-cost variability, but shippers avoid over-compensating carriers based on an inflated national average. The savings for a company with thousands of freight movements annually can be substantial. For instance, one of the largest arts and crafts retailers in the United States reduced its fuel costs by 30 percent in its first year of using Breakthrough’s technology.¹

Another example is Peloton Technology, which has developed a system that digitally connects two trucks on the road via direct Vehicle to Vehicle (V2V) communications. This system allows the rear truck to react immediately to what the front truck is doing—meaning, the trucks accelerate and brake simultaneously and, thus, can safely operate more closely together to form a platoon. The “drafting” effect that platooning creates—similar to what race cars on a track experience—reduces fuel consumption on average by 4.5 percent for the lead truck and 10 percent for the following truck—or 7 percent overall.²

These are just two examples of innovative technologies that can dramatically improve logistics operations. And the number of such vendors continues to grow rapidly, making it difficult for shippers to continually identify, monitor, and vet new vendors that could bring to the table truly transformative capabilities. Emerging XPL service providers can help. They’re plugged into all the relevant networks, so they can effectively sort through the available options, keep on top of new vendors and technologies as they emerge, and evaluate vendors’ potential role in and impact on a shipper’s ecosystem.
Operationally execute the ecosystem to match supply with demand

Creating the right ecosystem is only part of the battle.

Another huge challenge for shippers in an XPL world is orchestrating the ecosystem in concert with suppliers and customers. This requires having deep, real-time visibility into both supply and demand, as well as the ability to predict and sense developments and trends to make fulfillment more responsive. In other words, shippers require more intelligent operations that help them to know what’s happening across their logistics network and ecosystem and act accordingly.
Intelligent operations can help shippers accomplish three critical objectives:

1. Avoid unexpected cost increases, especially during surges in demand and periods of capacity constraints.

2. Improve operations on an ongoing basis to strengthen cost management and enhance overall performance.

3. Pro-actively plan to avoid costly disruptions to the network.
A shipper with intelligent operations can, for example, predict the impact of a price change or promotion on demand and pro-actively ensure the right goods are delivered to the right location to meet that demand. It can continually model shipping capacity against current and expected demand to project and address potential imbalances—which is especially relevant with inbound imported products with long lead times. It also can mobilize the most appropriate providers to meet the unique needs and expectations of specific customers, and put in place a sustained diversion of freight to head off disruptions that could affect shipments (such as natural disasters, weather conditions, an impending labor strike, or congestion at ports).

Fundamental to these and other benefits are three distinct elements of intelligent operations. The first, and most basic, is robust enterprise data housed in a unified data repository. In most companies, organizational and operational siloes make it virtually impossible to get a true picture of the state of the enterprise’s operations. Very few companies have the ability to “see” a product from manufacturing origin through the operational supply chain to the point of sale. That’s why, before anything else, a shipper should bring together all the relevant data from its functions (including data generated by connected devices and sensors across the supply chain) into a centralized repository.
Once this rich data is collected and accessible, a company can use applied intelligence to significantly enhance its decision making. Applied intelligence, broadly speaking, extends human reasoning, processing, and decision-making capabilities, and is driven by a number of key technologies:

**Advanced analytics**—Advanced analytics tools help shippers predict what will likely happen based on multiple data inputs, as well as generate actionable recommendations across cost, service, and revenue. When augmented with advanced machine learning and cognitive computing, analytics can continuously learn and adapt to changing situations. One example is a tool provided by Clear Metal, which uses analytics, artificial intelligence (AI), and machine learning to generate hundreds of simulation models for every shipment a company makes to predict the probability of a shipment moving from “on time” to “late,” and determine what steps to take in response.³

**Automation technologies**—Automation technologies can streamline logistics operations and make them highly responsive, which is vital to keeping pace with the speed of change in demand and supply. For instance, one 3PL is using robotic process automation (RPA) as a customer service agent to handle email requests to pick up a shipment. The software robot pulls the relevant information from the email, schedules the pick-up, then alerts the customer and carrier of the pick-up specifics. The entire process happens in seconds instead of hours.⁴ Other companies are deploying AI to handle increasingly more sophisticated tasks. According to DHL, one of the biggest emerging uses for AI in logistics is in what the company calls “anticipatory logistics.”⁵ An AI tool predicts demand before any orders are placed, allowing a company to arrange for shipping before demand hits—and, thus, slash delivery time.
Block chain—Although still nascent, blockchain is maturing quickly and soon will also play a major role in intelligent logistics operations. It eventually will serve as the foundation for facilitating secure transactions among all ecosystem parties and across the supply chain—a goal that’s being furthered by the Blockchain in Transport Alliance, which has brought together freight industry participants to improve blockchain standards and education. Blockchain has the potential to transform and simplify the entire supply chain by eliminating paperwork and duplicate transactions, creating “smart contracts,” and having a single system of record for all involved parties.

Tying all of these technologies together is a robust platform, the foundation for integrating operations and fostering collaboration, through which a shipper manages its logistics operations and ecosystem. Increasingly, sharing a platform with other companies will be the most viable option, as it enables a company to achieve greater scale and accompanying savings.
Data and applied intelligence are useless without a third key element of intelligent operations: talent.

In an XPL setting, people remain critical, except they are expected to need new skills that most logistics organizations today don’t have. Core functional logistics expertise still should be important, but that should be accompanied by innovative, creative thinkers who are adept at figuring out how to use new technologies such as AI and analytics to solve business problems. Data scientists are also expected and required to create the algorithms that power applied intelligence, as will people who will manage the various ecosystem elements to fulfill demand.

Importantly, shippers don’t have to build these capabilities themselves. They can leverage an XPL service provider for the specific capabilities they can’t or don’t want to develop in house, or even have a provider assume complete responsibility for orchestrating the ecosystem. Conceptually, XPL providers operate in much the same way as 3PLs today handle distribution and fulfillment. But by bringing together innovative technologies and a new logistics ecosystem, they can kick start the kind of change that shippers require—and that’s beyond the ability of the typical 3PL.
A true logistics transformation

When Joe, the logistics head in our opening scenario, set out to create his logistics organization, the world was much simpler. Demand was more homogenous and predictable, digital disruption had yet to be fully unleashed, and traditional 3PLs were proving adept at doing shippers’ heavy lifting.
Of course, today the world is much different, but most companies’ logistics operations aren’t. Shippers know they should change, but it’s a daunting prospect that’s virtually impossible to address while juggling the day-to-day activities that keep the current business running.

The emerging concept of XPL represents a bridge from the fixed logistics networks of the past to the agile and responsive ones required to excel today and in the future. With XPL, shippers can begin to create an ecosystem of innovative capabilities and technologies that can help them build intelligent logistics operations to most efficiently and effectively synch supply and demand—whether that’s in a consumer goods setting or any other type of company with physical goods and demanding, often unpredictable customers. With XPL, shippers can keep logistics costs in check, continually improve logistics performance, and avoid network disruptions. And by choosing to work with an XPL services provider, shippers can start benefiting from XPL right away without having to invest the time and money building XPL capabilities themselves.

In short, XPL can help shippers transform how they move goods to keep pace with customer expectations while pro-actively managing logistics costs. Just ask Joe how it’s worked out for him.
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1. Source: http://www.breakthroughfuel.com/blog/arts-crafts-retailer-case-study/, accessed July 20, 2018
2. Source: https://peloton-tech.com/, accessed July 20, 2018
6. Source: https://bita.studio, accessed July 30, 2018

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