

Time for AI to conquer freight management complexity

By Gabriel T. Ruiz Jr., Chief Innovation Officer, Co-Founder & Board Member at Magaya

The news hype about AI (artificial intelligence) and the big money investments flowing into the freight and logistics technology space seem to indicate that the industry is making great strides in adopting digitalization and using the latest forms of technology, such as AI. But, in reality, there is still a lot of room left to automate processes and adopt cutting-edge technology. The focus on AI and machine learning has been considerable in recent times, but is it actually being used by the forwarding and logistics industry today?



Overall, AI is a relatively untapped technology in the logistics space. We are barely skimming the surface of what's possible when existing AI technology is applied to logistics processes. There are a few freight tech solutions using machine learning and smart algorithms for specific functions, but AI in this industry is truly in its infancy, far from reaching its full potential. In general, less than 3-4% of the logistics industry is seeing any benefit from this technology. One of the reasons that AI is lagging is that it requires extremely large datasets, which have not historically been available in large part because of the lack of digitized and normalized data. Plus, it requires greater computing power, something that has not always been available, particularly to small and mid-sized companies. Over the next 3-5 years, as more businesses move to the cloud and move to digitize manual processes, we will see a noticeable pick-up in the development and adoption of AI solutions, an exciting moment for the industry.

SIMPLIFYING CUSTOMS COMPLEXITY

One area of freight management where AI has tremendous potential is in the processing of cross-border shipments. Customs compliance is one aspect of the industry where massive amounts of transactions are processed daily. These significant volumes have helped accelerate the use of AI to enable businesses to file the massive number of customs documents much, much faster. For instance, bots can be used to scrape information from a commercial invoice to auto-complete required CBP filings, saving time and reducing errors related to manual keypunching.

AI BOTS

Manually loading multi-page carrier rate contracts into a rate management system is another tedious, time-consuming, and error-prone process, albeit a common one for logistics service providers. At Magaya, we've developed a proprietary AI-powered rate processing bot to assist our fully-managed services freight rate management team, an important and unique value-add for our clients. In no time, the bot scans carrier contracts into our Magaya Rate Management solution, enhancing the team's productivity, delivering added value to our clients, saving precious time, and improving data accuracy.

Bots, built with AI, are self-thinking engines that scrape data and map datasets to automate repetitive tasks and provide faster processing as compared to humans. They help eliminate redundant, time-consuming processes, so that the human teams can focus their time on more strategic initiatives.

INTELLIGENT EXCEPTION MANAGEMENT

Real-time transportation visibility helps identify freight that is not moving as planned. It enables shippers and logistics partners to address in-transit freight disruptions, which could occur anywhere throughout the shipment journey, and are becoming increasingly common as of late. Timely digital alerts enable a shipper to make proactive adjustments, change delivery routings, adjust inventory, and keep customers informed. In addition, accurate shipment status

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Top 50 Logistics Tech Providers offers a glimpse into the future of the supply chain

By George Lauriat, AJOT

The AJOT's annual Top 50 Logistics Tech Providers offers a glimpse into the future of the supply chain. The list, which easily could have contained two hundred Tech companies, was whittled down in part with the object of looking forward to a different supply chain than exists today. The companies chosen were in some cases small or startups and in other instances well established doyens of the digital supply chain.

Perhaps the key to understanding the digital transformation that the supply chain is undergoing begins with rethinking the supply chain itself. While the popular conception of the supply chain is one of connecting links – which plays well into the concept that the supply chain is only as strong as the weakest link – in reality it is more akin to a transatlantic

cable with thousands of wires enabling interconnecting activities, both physical and electronic, working collectively to the goal of moving product. Although automation of cargo systems has been in play for many decades, the new supply chain is being built by 'digital duplicates' – the predominately physical and often repetitive tasks (physical and electronic) that are made digital.

However, much of what has happened in recent decades evolved as companies addressed problems in their own respective areas of operations. Most 3PLs, which are among the largest arbiters of digitalization, were originally trucking, warehouse or freight brokers, freight forwarders (see digital forwarders) and other industry providers. It's not surprising from (GLIMPSE – continued on page 24)

AJOT Top 50 Logistics Tech Providers

	Company	Headquarters		Website	Notes
		City	State/Country		
1	3PL Central	El Segundo	CA	3plcentral.com	Warehouse Management System (WMS)
2	AutoScheduler	Austin	TX	autoscheduler.ai	WMS Accelerator
3	Awery Aviation Software	Sharjah	UAE	awery.aero	CargoBooking aero, Aviation Software
4	Banyan Technology	Cleveland	OH	banyantechnology.com	Supply Chain Platform
5	Bluegrace	Riverview	FL	mybluegrace.com	Managed Logistics
6	Blume Global	Pleasanton	CA	blumeglobal.com	Supply Chain Platform
7	CargoSmart	San Jose	CA	cargosmart.com	Supply Chain Portal
8	Chain.IO	Philadelphia	PA	chain.io	Network Integration for Supply Chain
9	DAT	Beaverton	OR	dat.com	Trucking Freight Platform
11	Descartes	Waterloo	Canada	descartes.com	Logistics Technology Platform
12	Dispatch Track	San Jose	CA	dispatchtrack.com	Route and Schedule Planner
14	Doft	Walnut	CA	doft.com	Freight and Truck Matching Platform
15	E2Open	Austin	TX	e2open.com	B-to-B platform includes INTTRA, BluJay Solutions, and Amber Road
16	EBE Technologies	East Moline	IL	ebeships.com	Digital Trucking Solutions
17	Emerge	Scottsdale	AZ	emergemarket.com	Digital Freight Marketplace (DFM) - Freight Procurement Platform
18	Flexport	San Francisco	CA	flexport.com	Digital Freight Forwarder
19	FourKites	Chicago	IL	fourkites.com	Supply Chain Visibility Platform
20	Icontainers	Miami	FL	icontainers.com	Online Freight Forwarder
21	Info-X	Gurgaon	India	infox.com	Back Office Software/NVO specialty
22	Innovex-One	Singapore	Singapore	innovex-one.com	Digital Port Management
23	Kale Logistics Solutions	Mumbai	India	kalelogistics.com	Airport Cargo Community Systems, Port Community Systems
24	Kuebix	Maynard	MA	kuebix.com	Transportation Management System (TMS) - Part of Trimble
25	Loadsmart	Chicago	IL	loadsmart.com	Digital Freight Broker
26	Magaya	Miami	FL	magaya.com	Digital Freight Platform
27	Manhattan Associates	Atlanta	GA	manh.com	Supply Chain Platform
28	MercuryGate International	Cary	NC	mercurygate.com	TMS - Acquired Cheetah Software
29	Morpheus Network	Burlington	Canada	morpheus.network	Supply Chain Blockchain Software
30	NAVIS	Oakland	CA	navis.com	Traffic Operations System (TOS)
31	Nexxiot	Zurich	Switzerland	nexxiot.com	Devices and Tech Platform
32	Numina Group	Woodridge	IL	numinagroup.com	WMS
33	OrbitMI	New York City	New York	orbitmi.com	Orbit Saas - Specializes in Maritime Data
34	Platform Science	San Diego	CA	platformscience.com	Telematics - Fleet Management
35	PortXchange	Rotterdam	Netherlands	port-xchange.com	Digital Port Management
36	Project44	Chicago	IL	project44.com	Real Time Visibility
37	Rail Inc	Cary	NC	public.railinc.com	Rail Industry Technology Provider- TransMetriQ, Rail Management System (RMS)
38	Route4Me	Tampa	FL	route4me.com	Route Planner
39	Sleek Technologies	Chicago	IL	sleek-technologies.com	Freight Procurement Software
40	SMC3	Atlanta	GA	smc3.com	LTL Pricing and Services Platform
41	Tecsys Inc	Montreal	Canada	tecsys.com	WMS
42	Tideworks Technology	Seattle	WA	tideworks.com	TOS
43	Traxen	Plymouth	MI	traxen.com	IQPilot System for Trucks
44	TrueCommerce Inc	Pittsburg	PA	truecommerce.com	Multi Enterprise Supply Chain Solution-EDI Speciality
45	Turvo	San Mateo	CA	turvo.com	TMS - Acquired by Lineage Logistics and Bay Grove
46	Twill Logistics	The Hague	Netherlands	twill.net	Digital Forwarding Targeting Small and Medium Shippers - a Maersk company
47	Uber Freight	San Francisco	CA	uber.com	Logistics Platform - Acquired Transplace in 2021
48	Vinturas	Leek	Netherlands	vinturas.com	Digital Automotive Logistics
49	WiseTech Global	Sydney	Australia	wisetechglobal.com	TMS
50	Zebra Technologies	Lincolnshire	IL	zebra.com	TMS

Source: public records