A holistic approach to make supply chains more resilient

Transformation based on automation, analytics, and optimized operations to improve end user experience across the logistics and supply value chain will empower the industry to regain its lost momentum

The Supply Chain Management and Logistics market, valued globally at $6 trillion[1] , is facing significant challen due to the COVID-19 pandemic, a unique disruption witnessed in the recent times. Such is the effect of the pandemic that the topline of core industries such as Retail, Consumer, Manufacturing, Technology, Medical devices, and Travel etc. have shrunk by at least 15-35%. As they strive to regain their mojo, Supply Chain Management (SCM) and Logistics will be the epicenter of focus with allied industries aiming at optimizing their supply chain with minimum investments for maximum returns.

Transforming the 'new normal' to meet challenges

The SCM & Logistics market is gearing up to the growth challenge with autonomous vehicles (drones for delivery), driverless rapid transport systems, driverless cars etc. as the industry moves towards being digital via operations.

With adoption of autonomous vehicles, the US SCM & Logistics industry is set to witness a decline of 45% in operating costs and save the US trucking industry between $85-125 billion annually[2] . Asset sharing is gaining ground in logistics, i.e. third party logistics (3PL) companies are aiming to be asset light in terms of investments on trucks, warehouses, trains and ships etc. and consumer companies are participating in asset sharing to optimize total cost of operations (TCO).

Focus on these transformation areas is helping the industry regain the momentum:

1. **Last mile - the new first mile:** Retailers, Consumer Packaged Goods companies, com munications services providers, manufacturers, and e-commerce market players are focusing on last mile deliveries, as last mile delivery costs can range from 25-30% of total transportation[3] costs globally. Last Mile delivery issues such as delayed, damaged, misplaced and lost deliveries can be addressed if shippers improve their internal logistics and SCM processes via either trans formation, process simplification or standardi zation for delivering goods along with 3PLs that they rely on because of their strength of network for last mile deliveries.
2. **Same day delivery a reality:** Algorithmic tracking and route optimization enable logistics companies to increase profits up to 16% and reduce up to 3.6% in line haul network cost[4].
3. **Analytics & technology-driven logistics:** Artificial Intelligence (AI), Internet of Things (IoT), Augmented Reality-Virtual Reality (AR-VR) are coming to the fore as shippers and 3PL companies make investments to increase strength of their supply chain. They are investing in supply chain visibility/control towers and predictive analytics to forecast demand, and optimize route planning and load balancing of their vehicles. Data suggests that 3PL firms find that analytics tools can produce additional efficiencies of up to 25%.
4. **Omni-channel experience:** Enabling seamless and consistent experience across all interaction channels (Mobile Apps, Email, Phone, Chat, Web etc.) within the supply chain for drivers, carriers and end consumers continues to be at the forefront of service providers' needs
5. **Need for instant gratification:** Near real time tracking of shipments by customers (Business to Business & Business to Customer) is no longer a luxury considering that ~ 50% of global population would shop online by 2021.

The opportunities for transformation

Let us examine a typical logistics value chain comprising of order entry, fulfilment, dispatch and customer support Depicted in (**Figure 1**). Within the value chain mapping, there exists several opportunities for transformation. Shippers/carriers can use various technologies to drive wide range of efficiencies and automation in areas such as route planning, load balancing, track and trace, optimal fleet utilization, designing of right network for delivery etc. This will reduce overall TCO while providing optimal services to end customers.

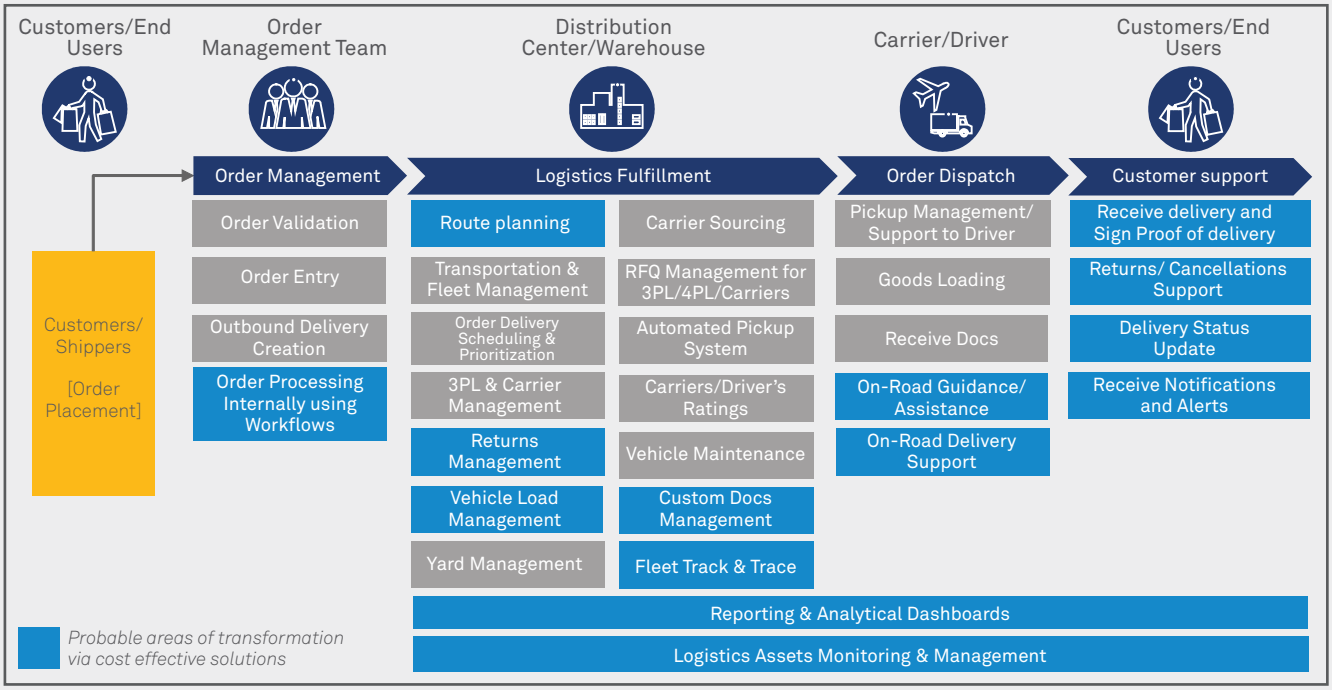

Figure 1: Customer order fulfilment lifecycle

A 3*3 XY matrix, (**Figure 2**) demonstrates the mapping of key activities and areas of investments balanced with a time and cost factor over a scale of low, medium and high, so that prioritization and grading of activities, either outsourced or in-house, from a transformation standpoint can be demarcated.

Key challenges such as ad-hoc route planning, mapping shipments against fleets and drivers, limited visibility on fleet operations, inability to provide real time assistance to drivers on the go, inability to incorporate pick up requests in existing route schedule, and inability to keep customers informed can be addressed through transformation.

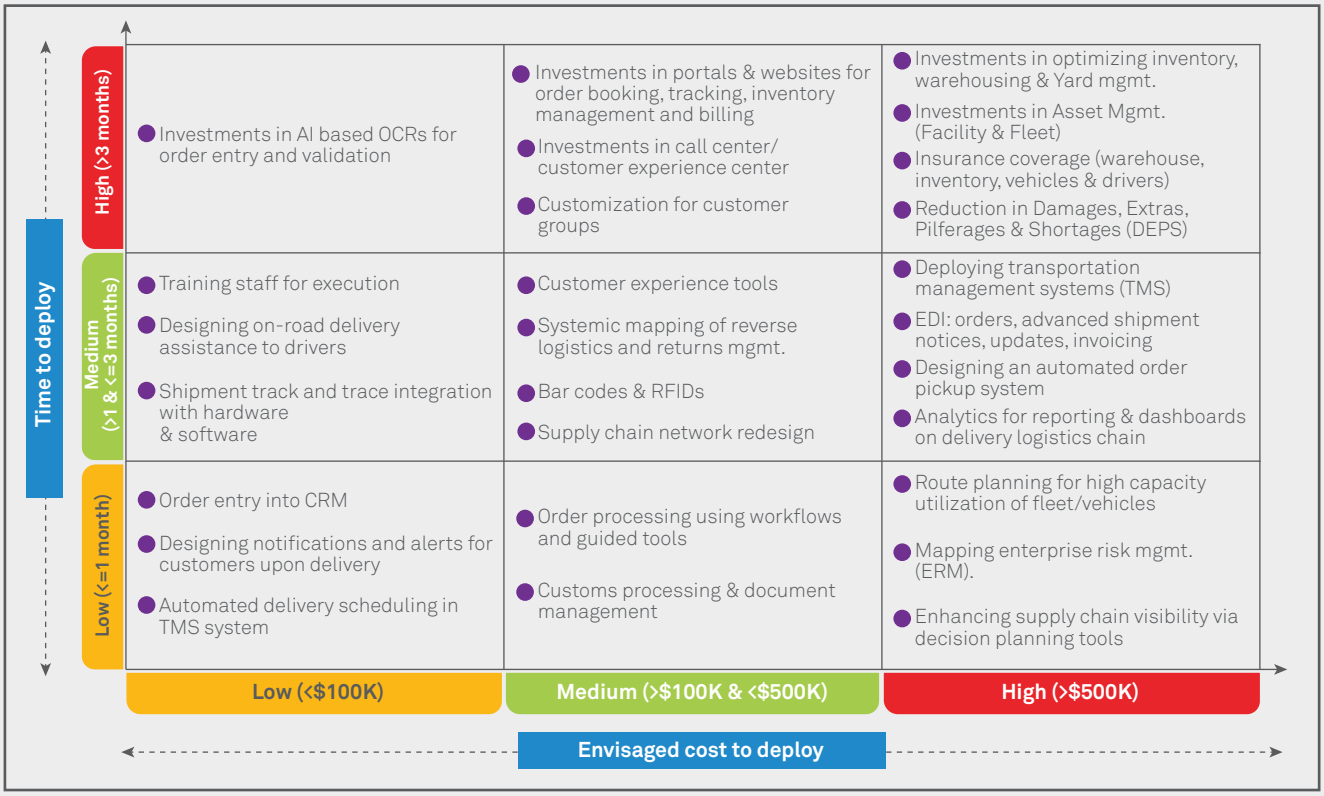

Figure 2: An indicative mapping of areas of investments (outsourced and retained) in delivery logistics

The disruptive approach to transformation

The challenges of transformation can be addressed via a four-pronged holistic approach that aims to standardize and simplify some operational activities, while automating some activities in the process, addressing challenges via analytics and all of this, by enabling higher customer experience. (**Figure 3**) is an indicative art of possible within the logistics value chain to reduce the TCO by optimizing operations.

The whitespaces in the supply chain that will be addressed through this approach are:

- Simplify and streamline delivery scheduling process via proper planning.
- Simplify process for drivers to deliver/ pick up goods "On Time" and "Right location" with zero hassle and guided route support.
- Automated system in place to allocate shipments with available resource pool (Driver/ Fleet) to optimize deliveries.
- Real time recommendations via a central control room on movement of fleet catering to end users and enhancing end use satisfaction by taking right business decisions in terms of increase in fleet, incorporation of SKUs (Stock Keeping Units) that constitute the right logistics mix.
- Using AI to guide and enable dynamic route planning and delivery scheduling.
- Intelligent chat bot solution to automate queries/ customer requests managed by the team.
- App based services that can be leveraged by drivers and customers for real time updates/ guidance on routes.

Figure 3: The 4-pronged approach to transformation

Creating value through transformation

A holistic approach to transformation across logistics and supply chain value chain is essential to realize the benefits of transformation. The resultant value-add to the business and operations will be:

~25-40% improvement in delivery times (On time delivery) that affect the customer happiness and satisfaction scores

~20-25% increase in number of deliveries/day

~15-20% in overall total cost savings
Up to 20% improvement in capacity utilization of fleet

Up to ~25% reduction in the overall turnaround time

~10-25% reduction in overall number of complaints and

~30-50% reduction in number of SLA breaches

All of these eventually lead to a happy and satisfied customer that impacts the overall brand and Net promoter score (NPS). Continuous improvement in operations, higher employee morale and greater focus of employees from tactical to strategic tasks are resultant outcomes.

In summary, the success of the logistics & SCM industry depends upon the pace at which they are able to cater to their customers by designing solutions that help transform delivery led last mile logistics operations at an optimal cost. Success, at the same time for the vertical customers (Retail, consumers, manufacturing, medical devices etc.) that either outsource or do it in-house, depends on how they optimally manage cost of logistics and distribution. They will need a priority heat map for transformation depending on some of the whitespaces indicated in the 3*3 matrix defined earlier as a function of time and cost to deploy. The core and allied industries would need to continue to have their heart in the right place to ensure growth in/post COVID-19 era to help themselves and their customers flourish.

References

[1]https://www.prnewswire.com/news-releases/total-logistics-market-report-2020---current-state-of-the-market-influencing-factors-strategic-decisions-regional-differences-301000423.html

[2]McKinsey & Company: Distraction or disruption: Autonomous trucks gain ground in US logistics

[3]https://supplychaingamechanger.com/last-mile-delivery-explained-infographic/

[4]https://www.mckinsey.com/business-functions/mckinsey-analytics/how-we-help-clients/algorithmic-route-optimization-improves-revenue-for-a-logistics-company

About the authors

Mehul Damani

Digital Operations & Platforms, Enterprise Operations Transformation, Wipro Ltd.

Mehul is a seasoned digital and automation thought leader with 13 years of rich exposure dealing with CXO level clients across business domains such as digital transformation, automation, customer(CX) experience enhancement, business strategy, B2B/B2C consulting, marketing & sales enablement operations. His industry focus includes verticals such as Retail, Consumer Goods, Travel, Manufacturing, Hi-Tech & Telecom.

Subrato Basu

Digital Operations & Platforms, Practice Head, Supply chain Management, Wipro Ltd.

Subrato leads the Practice for supply chain that includes Order Management, Logistics, Warehousing, Planning, Aftermarket Support etc. He possesses 18+ years of experience in creating SCM solutions across various industries. His focus is to leverage industry best practices and transformation levers to deliver enhanced end user experience.

Varun Garg

Digital Operations & Platforms, Practice Manager, Supply chain Management, Wipro Ltd.

Varun Garg is part of SCM Practice team with 7+ years of overall experience in IT industry. He comes with rich domain experience in Order Management, Logistics, Planning and other SCM functions. His industry focus includes verticals such as Retail, Consumer Goods, Travel & Medical devices.

Wipro Limited
Doddakannelli, Sarjapur Road,
Bangalore-560 035,
India

Tel: +91 (80) 2844 0011
Fax: +91 (80) 2844 0256
wipro.com

Wipro Limited (NYSE: WIT, BSE: 507685, NSE: WIPRO) is a leading global information technology, consulting and business process services company. We harness the power of cognitive computing, hyper-automation, robotics, cloud, analytics and emerging technologies to help our clients adapt to the digital world and make them successful. A company recognized globally for its comprehensive portfolio of services, strong commitment to sustainability and good corporate citizenship, we have over 180,000 dedicated employees serving clients across six continents. Together, we discover ideas and connect the dots to build a better and a bold new future.

For more information, please write to us at **info@wipro.com**

IND/INT-EOT/MAR2020-FEB2021