Revolutionize, Integrate & Innovate: Scaling up the Supply Chain Ecosystem
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Changing Supply Chain

The world faces accelerating social, economic & demographic changes and supply chain must prepare to change with it. Supply chains over the last century have demonstrated that achieving high performance requires fast recognition and response to the challenges and opportunities posed by a changing world. The function of supply chain has evolved in an incredible way. From serving a single purpose of delivering product from point A to B, supply chain has become an important lever to improve profit and differentiate one’s proposition in a complex business environment.

**Megatrends impacting Global Businesses & Supply Chain**

- **Changing Customer Expectations**: Like individual consumers, industrial customers now expect to get shipments faster, more flexibly, and with more transparency at a lower price. No surprise that across the industry, both operating models and profitability are under strain. And the pace of transformation for large manufacturing and retail customers may turn out to be even faster than for private final consumers.

- **Shift in Global Economic power**: By 2030, the E7’s purchasing power will overtake that of the G7. Some of these emerging economies will challenge the high-end consumer production currently dominated by developed markets. In doing so, they will increasingly become the core markets for global businesses.

- **Rapid Urbanization**: The rise in prominence of cities in the global economy has been truly unprecedented. In 1800, only 2% of the world’s population lived in cities — now it is 50%. We believe that cities cannot keep growing in the same way without becoming unsustainable. City leaders will be presented with a difficult choice: build a new smart city or deploy a bottom-up approach harnessing smart citizens.

- **Climate change & Resource scarcity**: As the world becomes more populous and urbanized, demand for energy, food & water will rise —increase of 35% is expected in global food demand by 2030. But the Earth has a finite amount of natural resources that can be used to satisfy this demand.

- **Technological Breakthroughs**: Technology is changing the very aspect of how logistics companies operate. ‘Digital fitness’ will be a prerequisite for success: the winners will be those who understand how to exploit a whole range of new technologies, from data analytics to automation & platform solutions. Those who don’t, risk obsolescence. But with so many technologies competing for management attention and investment, defining a clear digital strategy that’s integrated into business strategy will be critical.

*Source: PwC Report - How will megatrends shape the future supply chain*
The impact of the megatrends on companies may create a new supply chain ecosystem. Companies could respond with a revised set of design principles to create a new supply chain operating model.

**Self Sufficient**
Companies servicing megacities will develop self-sufficient supply chains. Eg, fashion garments will be designed by local designers, made from locally sourced materials & by local workers. This decentralized, self-sufficient model will allow companies to adapt and innovate specifically to the requirements of the location & populations they serve.

**Collaborative**
Flexible production capacity and capability can be achieved without a sharp increase in fixed costs by collaborating with value chain partners. This is becoming increasingly likely with technologies like 3D printing, enabling possibilities to create a range of products from a configuration-free production facility.

**Predictive**
Progressive supply chains forecast consumer behaviors by deploying cognitive computer learning technology to understand data inputs ranging from weather conditions to social media patterns. This same predictive power can be used to identify potential problems within the supply chain itself.

**Unfamiliar**
As technology advances, it may allow companies to explore new frontiers to satisfy demand for resources. With less than 5% of the ocean explored and growing interest in options such as asteroid mining, this appears feasible. However, supply chains will need the capability to manage unfamiliar and complex risks.

**Fluid**
Companies need to balance product customization with order to delivery time & production costs in order to succeed. Companies will respond by creating two classes of product, each with its own supply chain. One supply chain will focus on providing uncustomized products that are available off the shelf & designed to deliver value. The second supply chain will produce ultra-customized premium products to meet individual needs.

Based on PwC’s Global Supply Chain Survey, there are specific priorities that leaders have highlighted for their supply chains.

- How leaders view their supply chain
  - Leaders focus on best in class delivery, cost and flexibility to meet increasingly demanding customer requirements
  - One size does not fit all: Leaders tailor their supply chains to the needs of different customer segments
  - Interest in Next-generation technology and sustainable supply chain is growing
  - Leaders outsource production and delivery but retain global control of core strategic functions
  - Leaders in mature and emerging markets invest more heavily in differentiating supply chain capabilities

Source: PwC Report - Global Supply Chain Survey
PwC Perspective: The Future of Indian Supply Chain

Supply Chain is the backbone of a growing economy, and the Indian industry is rapidly evolving through the interplay of technology, infrastructure development, entry of new service providers and regulatory advances. However, currently the Indian Supply chain suffers from a few key challenges:

- The fragmented warehousing industry in India suffers from low levels of technology & lack of skilled labour. ~90% of warehousing space in India is with the unorganized sector.
- Transportation industry in India is largely fragmented with small sized fleet owners. 74% truck ownership is with small fleet owners of 1-5 trucks.

The Logistics Performance Index (LPI) by World Bank, measures and builds profiles of logistics friendliness of countries based on qualitative and quantitative inputs such as infrastructure, quality & competence, tracking & tracing etc. India’s performance, although improving, has a relatively poor ranking when compared to other major economies.

### LPI - 2007

<table>
<thead>
<tr>
<th>Country</th>
<th>LPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>3.84</td>
</tr>
<tr>
<td>China</td>
<td>3.32</td>
</tr>
<tr>
<td>Japan</td>
<td>4.02</td>
</tr>
<tr>
<td>Germany</td>
<td>4.1</td>
</tr>
<tr>
<td>UK</td>
<td>3.99</td>
</tr>
<tr>
<td>Brazil</td>
<td>2.75</td>
</tr>
<tr>
<td>Russia</td>
<td>2.37</td>
</tr>
<tr>
<td>India</td>
<td>3.07</td>
</tr>
<tr>
<td>Australia</td>
<td>3.79</td>
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<tr>
<td>Indonesia</td>
<td>3.01</td>
</tr>
<tr>
<td>Turkey</td>
<td>3.55</td>
</tr>
<tr>
<td>UAE</td>
<td>3.73</td>
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<tr>
<td>Thailand</td>
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</tr>
<tr>
<td>Singapore</td>
<td>4.19</td>
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<tr>
<td>Vietnam</td>
<td>2.89</td>
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</tbody>
</table>

### LPI - 2016

<table>
<thead>
<tr>
<th>Country</th>
<th>LPI</th>
</tr>
</thead>
<tbody>
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<td>USA</td>
<td>3.99</td>
</tr>
<tr>
<td>China</td>
<td>3.66</td>
</tr>
<tr>
<td>Japan</td>
<td>3.97</td>
</tr>
<tr>
<td>Germany</td>
<td>4.23</td>
</tr>
<tr>
<td>UK</td>
<td>4.07</td>
</tr>
<tr>
<td>Brazil</td>
<td>3.09</td>
</tr>
<tr>
<td>Russia</td>
<td>2.57</td>
</tr>
<tr>
<td>India</td>
<td>3.42</td>
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<tr>
<td>Australia</td>
<td>3.79</td>
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<td>Indonesia</td>
<td>2.98</td>
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<td>Turkey</td>
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<td>UAE</td>
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<td>Thailand</td>
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<td>Singapore</td>
<td>4.14</td>
</tr>
<tr>
<td>Vietnam</td>
<td>2.98</td>
</tr>
</tbody>
</table>

Source: World Bank

As per PwC, there are 4 major trends shaping the supply chain space in India:

1. **Regulatory Enablers**
   - GST implementation, likely to reduce by ~20%, the time spent for tax compliance at interstate checkpoints. Other benefits in cost and service level expected.

2. **Infrastructure Investments**
   - Investments in DFC
   - Logistics Parks
   - Multi modal logistics hubs
   - Industry Hubs like FTZ, SEZs

3. **Emergence of Organized 3PL Players**
   - Low 3PL share (10%) but market expected to increase at 20%+ CAGR to $8.9 billion
   - Economies of scale & industry specific solutions with VAS
   - Investments where unit economics work

4. **IOT & Other Technology Automations**
   - Firms are beginning to leverage new technologies / IoT concepts—to make smarter, quicker decisions by remote/real time tracking – e.g., Optimize fleet tracking by monitoring traffic patterns.
GST is expected to play a transformative role in the way our economy functions. It will add buoyancy to our economy by developing a common Indian market and reducing the cascading effect on the cost of goods and services.

**Warehouse Consolidation**

The distribution hub landscape is expected to change with GST coming in. It presents an opportunity for industry players to consolidate their warehouses and set up larger facilities, which will bring in supply chain efficiencies.

### Driving Factors

- Need for bigger spaces due to consolidation of warehouses
- Major 3PLs would go for bigger facilities to bring in economies of scale

### Potential location

- Aligned to upcoming/proposed infrastructure projects like DFC, GQ, Ports, etc.
- Developing industrial hubs like Free trade zones, dedicated industry parks, SEZs
- In India, about 110 new logistics parks are expected to be operational with an estimated cost of USD 1 Bn.

### Emerging storage models

- Multi Model Logistics hubs planned at 15 locations – are—Delhi NCR; Mumbai, north Gujarat (Ahmedabad and Vadodara); south Gujarat (Surat and Bharuch); Hyderabad; north Punjab (Amritsar, Jalandha); south Punjab (Ludhiana, Sangrur, Patiala); Jaipur; Kandla; Bangalore; Pune; Vijayawada; Cochin; Chennai and Nagpur

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**#1** In a post GST scenario, consolidation of warehouses across clusters will yield significant benefits that were not possible in a pre-GST environment due to tax considerations

**#2** Same service levels can be maintained with fewer warehouses

**#3** Product path flow and serving locations would be optimized based on demand centres

Source: PwC Research
Other efficiency opportunities in transportations and logistics industry

Cost saving from Optimized delivery schedule
One of the factors leading to the downtime of vehicles is trade barriers, such as check-post inspection, filing of waybills/entry permits, compliances under Entry Tax laws and local levies. Under the GST regime, the interstate movement of goods will be subject to IGST, wherein all movements will be ‘tax paid’. Additionally, the GSTN will have an audit trail of the movement of goods across the state boundaries. Representation by the industry should be made to the government for the removal of check-post related compliances. This will lead to optimization of delivery schedules and the operational costs of transporters, resulting in competitive pricing.

Optimized Sourcing and Manufacturing
Among other factors, sourcing and manufacturing decisions were dependent on indirect tax considerations. In the GST regime, due to fungibility of credits, these decisions shall be made from a supply chain perspective.

E-commerce
Under the indirect tax regime, the e-commerce industry was facing significant challenges. GST will be good for the e-commerce industry as it would eliminate hurdles in inter-state delivery and subsume the entry tax introduced on e-commerce shipments by some states.

Supply Chain benefits will be based on demand management and logistical benefits rather than tax costs. Redesign of supply chain can help companies derive value with potential benefits to the tune of 8-12% in distribution.

A leading domestic FMCG company has reduced warehouse footprint from 33 to 22, and reduced transit time from 5 days to 3.5

Domestic operations of an electronics MNC has reduced warehouse footprint from 31 to 21, and reduced transit time from 6.5 days to 5 days

Source: PwC Research

Opportunities of 2-4% in sourcing and 8-12% in network across the supply chain
Infrastructure gaps have had a crippling effect on logistics network in India and stakeholders have often factored delays into the movement of goods schedule. With the introduction of GST, the logistics sector getting an infrastructure status, and the subsequent increase in government spending, the supply chain sector provides significant opportunities for collaboration and private sector investments, leading to a more consolidated supply chain ecosystem.

**Planned Dedicated Freight Corridors**
- Eastern and Western Dedicated Freight Corridors expected to substantially enhance rail infrastructure for freight trains and add benefits to cost (double stacking) and speed (reduced congestion) on trunk lines
- Eastern corridor is 1760km long (Ludhiana to Kolkata), Western corridor is 1468km (JNPT to Dadri)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Existing</th>
<th>On DFC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Train length</td>
<td>700 m</td>
<td>1500 m</td>
</tr>
<tr>
<td>Train load</td>
<td>5,000 tonnes</td>
<td>13,000 tonnes</td>
</tr>
<tr>
<td>Container Stack</td>
<td>Single stack</td>
<td>Double stack</td>
</tr>
<tr>
<td>Max Speed</td>
<td>75 Kmph</td>
<td>100 Kmph</td>
</tr>
</tbody>
</table>

*Source: PwC Research*

### Bharatmala Project
- 51,000 km long expressways
- INR 10 tn. investments

### Sagarmala project & Inland Waterways
- 415 projects along coastline, 6 mega ports under Sagarmala
- 106 inland waterways being assessed for feasibility

### 35 multimodal parks and 10 inter-modal stations
- The Delhi-Mumbai Industrial Corridor and Development Corporation has awarded companies over US$2.3 billion in contracts for the development of multimodal logistics hubs in Maharashtra, Gujrat and NCR; and in the process of granting another US$1.5 billion for the same in UP & Haryana
- It will provide end-to-end supply chain services, such as small processing facilities (grading and packaging) and final delivery and transport services.
Trend #3: Emergence of organized 3PLs

3PL share of Indian logistic industry is low compared to mature economies like Japan (80%), US (57%) and Europe (40%). In India, 3PL Industry accounts for a 10% share of outsourced logistics in 2017, however it is slated to grow to 13% by 2020, growing at 22% CAGR, ~1.8x the industry CAGR.

- **GST implementation & infrastructure industry status** is leading to consolidation of the supply chain ecosystem across warehousing & transportation. This creates demand for organized & integrated service providers.
- The rapid **growth of e-commerce industry** is accompanied by rising customer expectations on expedited delivery & omni-channel elements. This has created the demand for an integrated & efficient supply chain provider to partner for growth.
- **Technology proliferation & increased investment in supply chain infrastructure** is aiding the growth of 3PL by providing an environment conducive for organized players.

### 2017 (Million US$)

<table>
<thead>
<tr>
<th>Sector</th>
<th>Value (Million US$)</th>
<th>Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logistics Industry</td>
<td>61,985</td>
<td></td>
</tr>
<tr>
<td>Outsourced Logistics</td>
<td>49,088</td>
<td>79%</td>
</tr>
<tr>
<td>3PL</td>
<td></td>
<td>4,908 (10%)</td>
</tr>
</tbody>
</table>

### 2020 (E) (Million US$)

<table>
<thead>
<tr>
<th>Sector</th>
<th>Value (Million US$)</th>
<th>Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logistics Industry</td>
<td>87,261</td>
<td></td>
</tr>
<tr>
<td>Outsourced Logistics</td>
<td>69,938</td>
<td>80%</td>
</tr>
<tr>
<td>3PL</td>
<td></td>
<td>8,920 (13%)</td>
</tr>
</tbody>
</table>

**CAGR (2017-20)**

- 12%
- 13%
- 22%

*Source: Industry Reports, PwC Research*
Production-oriented Contract Logistics is an industry competency-focused play, since there are just a few manufacturing hubs in India.

Consumption-oriented Contract Logistics is largely a network / distribution play that will depend on control of infrastructure and integration of channels.

Given the variety of operating models and the unique advantage & challenges faced by the 3PL industry, there are only a handful of ‘true’ 3PL players.

<table>
<thead>
<tr>
<th>Category</th>
<th>Key Characteristic</th>
<th>Competitive levers</th>
<th>Challenges faced</th>
</tr>
</thead>
<tbody>
<tr>
<td>3PLs</td>
<td>• Strong industry focus</td>
<td>• Single window for customers</td>
<td>• Few scale players</td>
</tr>
<tr>
<td></td>
<td>• Integrated play</td>
<td>• Extension of client’s supply chain</td>
<td>• Inability to manage cyclicity given asset light nature</td>
</tr>
<tr>
<td></td>
<td>• Mostly asset light, selective ownership</td>
<td>• Partner, instead of vendor</td>
<td>• Pricing models still evolving</td>
</tr>
<tr>
<td>Warehouse Providers</td>
<td>• Many asset heavy players</td>
<td>• Network</td>
<td>• Managing utilization</td>
</tr>
<tr>
<td></td>
<td>• Players focused on VAS</td>
<td>• Size of Warehouses-lower unit cost</td>
<td>• Land availability; aggregation; pricing of service</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• VAS &amp; secondary transportation improve stickiness</td>
<td>• Lack of willingness to pay for premium quality</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Optimal mix of contracts + walk ins</td>
<td></td>
</tr>
<tr>
<td>Transporters</td>
<td>• Highly fragmented market</td>
<td>• Network &amp; asset base</td>
<td>• Margin pressure</td>
</tr>
<tr>
<td></td>
<td>• Multiple regional players</td>
<td>• Pricing</td>
<td>• Few contracted clients</td>
</tr>
<tr>
<td></td>
<td>• Mostly commoditized</td>
<td>• High value services-express, LTL, project cargo</td>
<td>• Unpredictable asset utilization</td>
</tr>
</tbody>
</table>

3PLs need to re-evaluate their operating model across these following dimensions:

- **Relationship**
  - Long term contracts with customers ensure regular and predictable volumes
  - Cross-referrals from customers in the same industry a key value driver

- **Manpower**
  - Availability of skilled manpower is a key constraint for the 3PL industry, and retaining talent is a critical differentiator
  - Key personnel bring customer relationships and industry specific logistics know-how

- **Asset ownership**
  - Many 3PL are beginning to own assets such as trucks, WH to have end-to-end control over cargo
  - Relationships with key value chain partners such as freight forwarders is necessary

- **Processes**
  - Effective processes are needed to tightly control operations e.g., route optimisation
  - Customers are increasingly demanding technology
  - Service levels are critical for 3PL providers e.g., timely pick up, call centre

- **Industry VAS**
  - 3PL is hinged around offering industry-specific supply chain solutions
  - Ability to help customers re-engineer their supply chain differentiates one 3PL from another
Trend# 4: Technology Automations

Supply chains have become complex and additional vulnerabilities have emerged which are difficult to measure and manage. Fierce competition and fast-changing customer requirements have forced companies to adopt a more dynamic, effective and flexible supply chain system.

Supply chain analytics facilitates the design and operation of more efficient and resilient supply chains via analytical solutions addressing risk diagnosis, logistics assessment, and demand planning and inventory management. Mobile technologies can help support this goal by integrating the supply chain with other business functions, facilitating collaboration with suppliers for greater resilience and measuring and managing supply chain data.

There are 3 major areas where automation is being explored: Mobile Computing, Cloud Computing & Internet of Things.

**Mobile Computing**

Mobile devices such as radio-frequency identification (RFID), barcode scanners, mobile computers and supply chain applications can help track shipment status visibility, inventory, line of sight into equipment and worker performance, and also manage supply chains from anywhere.

Mobile tools are ideal for collecting significant data points such as GPS data for trucks in transit as well as data from different fields such as warehouses and manufacturing facilities. Mobile technologies and products such as smartphones, tablets and apps play a key role in optimizing the supply chain while offering significant analytical benefits.

**Cloud Computing**

Cloud computing can transform the digital supply chain network. Solutions based on the cloud, delivered through the software as a service (SaaS) model, can be adopted for all components of the supply chain as it provides benefits like low upfront investment, secure access, faster deployment, simplified integration, continuous upgrades and effortless scalability. Cloud computing can be utilized efficiently in supply chain activities such as planning and forecasting, logistics management, sourcing and procurement, and service and spare parts management. Cloud-based computing and tailored apps that harness data can be used to deliver greater bandwidth and scalability at the operations level. These apps can also be used for external data, such as weather information, to increase efficiency and accuracy.
Internet of Things

It is estimated that 50 billion objects will be connected to the Internet by 2020, producing a massive volume and variety of data at unprecedented velocity. Big data tools will be used to collect, store, analyze and distribute these large data sets in order to generate valuable insights, create new products and services, optimize scenarios, etc.

• IoT improves inventory management by bringing real-time visibility of the inventory and giving a clear view of how much is left, thus reducing both out-of-stock and overstock issues.

• Fleet management companies use IoT by equipping the load carried by the company with sensors which collect all kinds of information—namely destination, navigation and transport conditions—to help manage maintenance schedules and daily vehicle usage, and automate asset tracking.

• Helps monitor driver performance and ensure that drivers take the most effective and shortest possible route. This results in reduced costs, improved efficiency, increased service, removal of defective goods, lower transportation costs due to a lower reshipping rate and lower risk along every step of the supply chain.

The ET Supply Chain Summit deliberated on end-to-end functions of supply chain management such as: Planning, Forecasting, Sourcing, Procurement, Inventory Management, Risk Management, Warehousing, Distribution, Marketing, Customer Relationships Management, Supply Chains, Digitization, Governance and Regulation, Supply Chain Intelligence, etc. The summit brought together 300+ industry leaders from the supply chain & logistics industry for an inspiring, relevant and challenging content where one could take stock and plan their next step in action. With parallel tracks, webinars, interactive sessions, fireside chats, case studies, panel discussions, Crystal Ball Gazing and keynotes, the Summit focused on the impact one can make today for a better future.
Continuing the legacy of previous 4 editions, the 5th Edition of The Economic Times Supply Chain Management & Logistics Summit held on 8th June 2018 brought together eminent government leaders and industry stalwarts to deliberate on the key issues, latest developments & future requirements of India Inc. from Supply Chain.

This year, the event aimed at being a catalyst for idea generation and was titled “Revolutionize, Integrate & Innovate: Scaling up the Supply Chain Ecosystem” – inspired from the need for an integrated, efficient supply chain ecosystem – across industry, logistics players and the government – to truly enable India achieving its target to be a USD 5 trillion country by 2025.

The day long summit was honored by the presence of our chief guest Shri Suresh Prabhu, Minister for Commerce & Industry and Civil Aviation of India who set the tone of the day by sharing that for the first time, Indian government has incorporated ‘Logistics’ as a division in the department of commerce and industry which is aggressively working on a nation-wide Integrated Logistics Plan.

This was followed as an equally insightful Keynote address by Shri Acharya Balkrishna – MD & CEO, Patanjali Ayurved, who lauded the government on its many recent initiatives while stressing the need for continued collaboration of industry and government in policy making on critical areas like skill development, ease of doing business and enabling a smooth supply chain.

This was followed by a special address from Shri Shyam Jaju, National VP & State-in-charge (Uttarakhand) for BJP – who talked about some of the key policy enablements the government is doing under the able leadership of our Prime Minister Narendra Modi.

This event brought together over 300+ delegates, 30+ eminent panelists from the industry who debated during the day on key topics in the context of India’s supply chain today.

These panel sessions covered a myriad of topics across i) developments in the policy & regulatory landscape, ii) key challenges and opportunities in Warehousing and Distribution, iii) eCommerce industry and the unique way in which they’ve leveraged supply chain as a true differentiator, iv) innovation in the Engineering & Manufacturing sector and v) key challenges in the FMCG & Pharmaceutical industries.

Senior partners and directors from the knowledge partner PwC chaired the panel discussions and was graced by eminent supply chain leaders from marquee companies across industries in India.

Given the solution-oriented focus of all the panel sessions, the key takeaways from the summit have been captured in this whitepaper for the perusal of industry & government alike.
The event kicked off with our honorable Chief Guest, Shri Suresh Prabhu, emphasizing how Logistics forms the backbone of all economic activity which in turn defines how fast an economy grows. Mr. Prabhu touched upon how the new logistics division in the department of commerce, created for the first time in the country’s history, is preparing a national integrated logistics plan to strengthen this backbone of India’s growth story.

The top priority initiatives of the new division include development of nearly 34 logistics parks around the country, an integrated digital logistics platform to increase the speed of logistics and reduction in costs by connecting buyers with logistics service providers along with government agencies such as customs, port community systems, etc.; and Dedicated Freight Corridors planned by the Railways to provide logistics support to the ‘Make in India’ campaign for the benefit of smooth freight movement.

India is poised to remain the fastest growing large economy in the world, and its GDP is expected to reach USD 5 trillion by 2025. Mr. Prabhu envisaged the contribution of services to this GDP at about 60% and Logistics to be a substantial portion of that. The trigger for this contribution would be the high investments in 12-14 champion sectors – fertilizers, food, petroleum, mines, etc., which are considered as some of the major growth enablers.

He also shed some light on a first ever cargo policy that is under preparation by the government. All these developments are expected to have a transformational impact on India’s goals with regard to Ease of Doing Business as well as attaining an increment of ~2-3% in GDP growth.

"Proper supply chain which is efficiently managed is critical for India to drive the country towards becoming a $5-trillion economy in the next few years...

Key Highlights

- The new logistics division in the department of commerce is preparing a national integrated logistics plan.
- The top priority is the development of 34 Logistics Park around the country.
- Dedicated freight corridors planned by railway for smooth freight movement.
- Integrated logistics platform to be launched to increase speed and reduce costs.
- First ever cargo policy is under preparation."
The event was also blessed with a Keynote address from Shri Acharya Balkrishna – MD&CEO of one of the most disruptive FMCG Company in India in recent times – Patanjali Ayurveda.

Shri Balkrishna talked about the key changes being brought into play by the government in the supply chain & logistics space and also the pressing need to expedite some inherent gaps in the skill & ease of doing business space.

Post appreciating the Government’s initiatives to build a stronger Logistics Sector, Shri Balkrishna initiated his address with an urge to the policy makers to also focus their attention towards skill development of the manpower involved in the execution of the logistics function. He emphasized that the Government policies around skill development should include logistics proficiencies, be it developing or operating warehouses, transport facilities and others. While labour is currently in abundance in the country and there are encouraging incentives by government on expansion, the lack of adequate training has hampered the speed of execution and reliability of some of these initiatives.

He also emphasized that while logistics spend in India is ~14% of GDP vs. ~5-8% in developed countries, the quality of logistics services and infrastructure needs significant improvement. India, he said, has accorded top priority in addressing its economic growth vide initiatives such as GST. However, he believes there are still certain roadblocks for the country to crossover in order to achieve the ‘Ease of doing Business’ ranking that it is aiming for. Citing an example of how currently the country’s maximum logistics banks on roadways and how post-GST truck drivers are finding it difficult to even replace their worn out tyre due to the high GST rate of 28% as against 5% earlier, he said that government still needs to pay more attention to the operational challenges that are enhancing discomfort post GST. He continued to mention that policies mandating e-way bills over and above the GST documents and separate transport carriage requirement for food and non-food items are adding to post-GST woes of many FMCG manufacturers.

Lastly, Shri Balkrishna reiterated that it is imperative for the policy makers to resolve these small lingering effects post-GST in order to achieve the envisaged integrated ecosystem for sustainable supply chain management.

**Key Highlights**

- While the logistics spend in India is ~14% of GDP vs ~5-8% in developed countries, the quality of logistics services and infrastructure needs significant improvement.
- Skill development of manpower involved in the execution of the logistics function (warehouse operations, transportation) is needed. Lack of adequate training has hampered initiatives to strengthen the logistics sector.
- There are roadblocks for the country to achieve the ‘ease of doing business’ ranking; such as e-way bills mandate over and above GST documents and separate transport carriage for food and non-food items.
- Despite the implementation of GST, policy makers need to resolve on ground challenges to achieve the envisaged impact.
Today we are in the midst of many disruptive changes. GOI has rolled out a host of policy measures which are intended to improve the ease of doing business in India. Logistics forms the bedrock of these initiatives and the government has been actively trying to address the weaknesses in the Indian logistics landscape. India aims to move up in the rankings in terms of ease of investments as well as overall logistics performance.

**GST and e-way bill has been the biggest such change in regulatory landscape**

For the first time in the history of India, there is a single tax cutting across the Centre and the States. The GST reform has merged 17 taxes present between the Centre and the States leading to the realization of ‘One Nation, One Tax’.

**“GST has led to the removal of inter-state barriers and has brought down logistics costs.”** – Arun Goyal

India has a dual GST system where GST is levied by States as well as the Centre. However, there is a single centralized portal for filing GST and tax payer does not have to file taxes on multiple platforms.

**Historically, GST has been implemented as a unitary system, i.e. the tax system is administered by the Centre and whatever revenues are generated are distributed between the Centre and the States, barring a few countries like Canada and Brazil where a partial dual GST is administered.**

GST reform has 4 key dimensions to it, i.e. political, economic, administrative and technological.

**Political** - Major political reform by creating an institution like GST council. GST council has worked as a very powerful body with representation of the Centre as well as 31 States to decide on GST rates across commodities.

**Economic** - India is pursuing the idea of ‘One nation, One Tax’. Though there are 4 tax slabs, we have a uniform tax which is same at the Centre and State level. GST merges different taxes across states.

**Administrative** - While there is a dual GST system, the tax payer has to report to only one tax department. The tax officers in the State and Centre have been empowered to act on each other’s behalf. If the tax payer for some reason needs to go to the tax authority, one can go to a single tax authority or access the entire system on an electronic platform.

**Technological** – Due to technological reforms we have been able to successfully launch e-way bill across the country from 1st April 2018.
E-way bill leads to dissolution of state boundaries, there is one law regulating the e-way bills. Earlier, when VAT was in force, there were entry forms for each state and each state had their own formats and their own laws governing these forms. Now, the businesses no longer have to go to state tax practitioners for their forms. From 1st April 2018, E-way bill has been launched successfully across the country.

Its major highlights are:
- All invoices should be logged into the govt. system.
- Due to the time gap (50 days) between the date of invoice and date of GST return filing, there is a possibility that businesses may not include all their invoice in their returns. E-way bill aims to prevent this.
- The goods should move only once on a single invoice. To check malpractices in movement, definite timelines have been allocated as per transportation distance.
- Goods should only move to the location for which the invoice has been raised and not to any other location.
- Once an e-way bill is generated, it cannot be modified and only cancelled if the movement is no longer required.

In May 2018, ~3.73 crore e-way bills were issued out of which 2.1 were interstate e-way bills and 1.6 were intrastate e-way bills.

Customs initiatives and policy changes are aimed at easing out the EXIM process

India is currently lagging behind its peers in container shipping traffic. This can be attributed to government controls and regulations as well as insufficient planning at transporter and industry level.

GOI is working towards easing regulatory controls. The government has built digital platforms, interconnected departments and provided traceability of transactions. Customs has rolled out single window clearance tools like SWIFT to reduce bottlenecks. Policies like DPD (Direct Port Delivery) and DPE (Direct Port Entry) have been launched with the aim of segregating those who are compliant to the law and giving them benefits. Customs aims to go completely paperless with the implementation of tools like e-SANCHIT, self-certification, e-sealing etc.

“Customs is ready to give clearance to 70% of containers arriving at the port within a few hours of the ship touching the berth, but the industry is not ready to pick them up.” - L. Satya Srinivas

According to CIAI and DuPont study, if the industry is able to pick up container within that timeframe they will be saving 150 – 200 USD per container. The industry needs to look into information management that may be required to bridge this gap. Customs and industry can work together on solving these problems.

National Logistics portal aims to link each stakeholder in logistics ecosystem

Each stakeholder in the logistics eco-system like govt. departments, terminal operators, logistics players etc. have built their own IT systems but these are working in silos. The national logistics portal is an initiative to horizontally link all these stakeholders. Once all the entities are on the platform, whole chain will be digitally linked.

Following are a few benefits of this initiative –
- The whole process of logistics and clearance will become completely paperless.
- From the analysis of the integrated data available from the portal, the govt. will be able to build better risk profiles, so much so that before arrival of cargo into the country, clearances are already in place.
These policy initiatives have benefited businesses in various ways

These initiatives have been successful in formalizing the trade in India, regulating it and disciplining it so that eventually there is rationalization of taxes which is beneficial to all.

GST is the largest indirect tax reform the country has seen. Implementation of GST has led to the consolidation of warehouses to create mother warehouses. There is an investment required in the consolidation of warehouses, but once it is made, it will help achieve economies of scale and reduce costs.

“From an EXIM perspective, GST has provided a simple concept of taxation of goods when goods cross a customs frontier.” – Amit Dawar

This will enable foreign suppliers to store their goods within hubs in India, provide just in time deliveries to the buyers within India and to use these hubs to distribute goods globally as well.

Road transportation efficiency has gone up by ~30% in terms of the distance a truck can cover on a daily basis.

The World Bank Logistics Performance Index ranked India 35 in 2016, compared to 54 in 2014 and India aims to be ranked in the top 20 in the future.

Changes in supply chain models fueled by disruptions

“We will look at the success of our free zones and special economic zones globally and bring that understanding and experience to SEZs in India” – Amit Dawar

Supplier Managed Inventory: Inventory models are emerging, where suppliers will hold inventories at their cost. This will reduce not only the cost but also the risk for the logistics player and drive JIT deliveries.

Combination warehouses: Relaxation of customs bond regulations and GST has led to the creation of combination warehouses of customs bond and domestic cargo being under the same roof on a common platform.

Digitization and data integration: Digitization is the need of the hour. Using one shipment data across platforms to avoid multiplicity and save time and effort.

“Implementation of regulatory initiatives like e-way bills and GST, has been a very smooth experience for all stakeholders.” – Samir Chaturvedi

The purpose of GST is to develop industries closer to the market. Even though there may be large markets located in remote places in the north-eastern and southern states, there is a dearth of resources like skilled manpower in these areas. This acts as a deterrent to industrial development and the state government should support the industries on this front.

Key Highlights

- The GST reform has merged 17 taxes present between the Centre and the States and has a centralized portal for filing GST.
- E-way bill leads to dissolution of state boundaries.
- Policy initiatives to ease EXIM process include; single window clearance tools like SWIFT, DPD (Direct Port Delivery) and DPE (Direct Port Entry) launched to segregate those who are compliant and going paperless through tools like e-SANCHIT, self-certification, e-sealing etc.
- National logistics portal will link departments, terminal operators and logistic players etc. to go paperless and allow analysis of integrated data.
- GST has led to warehouse consolidation, enhanced road transport efficiency by 30% and it will enable foreign suppliers to use storage in India for just in time delivery and global distribution.
The agenda of the Panel discussion was the transformation journey that the Indian warehousing and distribution sector has embarked on, post suffering years of neglect. The panel, consisting of both users and providers of logistics solutions in the country, deliberated on the interplay of enhanced technological advancements along with demand for improved Infrastructure for a Logistics industry, which accounts for nearly 13-17% of the GDP.

**Demand characteristics of the Indian Logistics Industry—Cold Chain and Digitization are the need of the hour!**

The panel discussion started with the notion that the fulcrum of any economy is a safe, secure and integrated Supply Chain. Even though a fast moving sector, 75% of the Indian Logistics Industry is still unorganized. The immature supply chain leads to a myriad of issues including the high food and drug wastage/ spoilage ratio, which proves to be a major bump in the country’s economy. The country loses about 20-40% of food grains every year due to spoilage on account of poor logistics or warehousing. Adding to the burden of safety, Panel chair highlighted that India is not yet equipped with advanced capabilities such as cold chain – the current country-wide capacity can offer cold storage to only 10% of the total food production, as opposed to ~80% in the Western countries. And out of this capacity, around 75% is dedicated to one commodity - potatoes.

Owing to this, the private sector is driving the wave of change for end-to-end value services including detailed data analytics, automated planned route tracking and stable temperature control up till last mile. There has been a shift in focus from increasing productivity to providing better storage, transport facility and curbing wastage. Product industries like fresh agriculture produce, frozen foods, chemicals and pharmaceuticals are demanding a fully temperature controlled and digitized value chain that makes use of technological tools like big data analytics for real time monitoring and coordination.

Still a far-fetched concept in India, but the concept of Built-to-Suit is also gearing up. Specialized projects that are end user centric are gaining a lot of attention, whether it is building fully automated warehouses equipped with best-in-class enclosures and safety systems or portable temperature controlled storage facilities closer to farmers.

"**Warehousing has become a Science and unless a person is passionate towards minimizing losses, the industry cannot move forward.**"

- V. Raju, VP – Chemical Business, Avvashya CCI Logistics

- The Panel also briefly touched upon how some customer organizations are looking at tackling large-scale supply chain challenges through the security of block-chain. Smart controls that connect multiple participating nodes
and enable broadcast of information in near real-time, apprise of the current state and location of the product and enable prevention of any violation. Smart packaging that controls and reports damages is also drawing a lot of attention.

**Supply side challenges**

The Panel then deep dived into the plethora of problems surrounding Cold Chain logistics, especially in pharmaceuticals and chemicals, where it is a major concern. Warehouse, transport facility and the service providers are currently primarily commodity agnostic. This ignorance stems from lack of awareness/willingness on the part of suppliers to cater to the end users. The focus is to have a very basic structure at a low cost. Inadequate labour knowledge and training in handling temperature sensitive products is also a concerning factor.

Adding further woes to the provision of cold chain storage supply is the lack of digitization – be it tracking of temperature or inventory - and time consuming and expensive government clearances. The Panel also shed light on the concept of racking or multi-storey warehousing in India which is still a distant dream. All of this combined leaves the customers plagued with sub-standard infrastructure (inadequate enclosures, alarm system, certifications) with low longevity.

**Way Ahead – Upgradation of the entire Spectrum...**

India still has a long way to go for enhancing the efficiency and effectiveness of its logistics processes. Although the Panel had a split opinion regarding the onus of responsibility for such upgradation, it was concluded that while the customers are adopting international best practices, the adaptation of similar standards on the supply side by both government and private players is equally mandatory to bridge the gap.

It was also envisaged that with the customer industries demanding better, safer and more technologically advanced logistics standards, the Logistics service providers should also ensure both industry specific compliances as well as faster adoption of Digital technology. Furthermore, while government support like capital investment subsidies (warehousing promotion zones), duty cuts and food parks are expected to open up the opportunities for setting up cold chains, a must have in the warehousing sector; effective single window clearances for speeding up approvals, mandating quality consistency assurance required by clients/regulators and putting statutory penalties on non-compliant warehousing facilities, could further strengthen the backbone of the entire supply chain management.

Lastly, for suppliers from both technology and logistics service sectors, the Panel identified certain investment opportunities that could create significant value in the Indian Logistics Sector. These included – building up on predictive value chains by converting data from all nodes of the value chain into information; and concentration on specialized projects, like chemicals and pharmaceuticals – to implement best-in-class warehouse management systems.

**“Logistics/ supply chain as a whole will not change with incremental innovation, it will change through disruption! What is good-to-have today will become a necessity tomorrow.”**

  - Bharath Kumar B, Head Global Marketing, Logistics Practice, Ramco Systems

**Key Highlights**

- India has a low penetration of organized supply chain & cold chain capacity for 10% food production, compared to 80% in the west. This results in high food wastage/spoilage ratio, 20-40% of food grain is lost every year.
- Private sector is driving the upgrades through end-to-end value services including detailed data analytics, automated planned route tracking and stable temperature control up till last mile.
- In Cold Chain logistics, warehouse and transport services are industry agnostic. Focus is to provide a basic structure at low costs, often with inadequate labour training and lack of digitization.
- Government is supporting the development of Cold Chains via warehouse promotion zones, duty cuts and food parks, but an effective single window clearance for approvals, quality assurance and monitoring is a must have.
- The customers are ready to adopt international best practices, the adaptation of similar standards on the supply side by both government and private players is equally mandatory to bridge the gap.
Dealing with the “New Normal” - Rising Customer Expectations in Ecommerce

Panel Chair: Saurabh Jain, Director, Operations & Supply Chain Consulting, PwC

Panelists:
Mr Sandeep Juneja, Vice President - Sales and Marketing, DHL Express India
Mr Amit Bagaria, Vice President - Paytm Mall
Dr. Prafulla Chandra Mishra, Statistical Advisor, Directorate General of Foreign Trade, Ministry of Commerce & Industry, Government of India
Mr Kamal Kishor Gupta, Senior Director Supply Chain - Regulatory, Delhivery
Mr Vikas Sharma, AVP - Supply Chain, Pepperfry

The panel discussion on ‘Dealing with the “New Normal” - Rising Customer Expectations in Ecommerce’ was an interactive discussion about the changing expectations of the consumers, challenges faced by the service providers and Government initiatives to aid ecommerce growth. The key topics discussed by this panel were

Changing consumer expectations and challenges faced by ecommerce companies

“Expectation of the Indian consumers have grown exponentially over the last 7-8 years” remarked Amit Bagaria, Vice President - Paytm Mall. Earlier, customers only wanted product and delivery reliability, but over the past 3 years, speed of delivery became a key consumer demand. Now customers also want trackability (They want to know when the product left the warehouse and its location at all times), flexibility (Changing the delivery location) and value added services like installation and demo of the products. “Logistics and supply chain is a primary touch point with customers” and the credit for the evolution of the industry goes to the tech partners and supply chain professionals for managing and meeting consumer expectations, he added. On what Paytm does to ensure faster delivery and superior customer experience, he stated that instead of only having 30-40 warehouses across the country for serving customers, delivering inventory from a wide network of shopkeepers enables a smooth and fast Omni channel customer experience. He also added that the distribution network is evolving from a hub and spoke distribution set up to a point to point level distribution.

Regarding the key challenges faced by the supply chain, Vikas Sharma from Pepperfry said that the key issues that the logistics team at Pepperfry faces are 1) The furniture is bulky and can go up to 200 kg so the handling and door delivery is a major concern 2) Some furniture is fragile as it contains mirror and glass. This needs to be handled delicately with the right packaging and labelling 3) RTOs are high (15-20%) and lead to additional costs. To overcome these hurdles, Pepperfry has developed in-house support models to enable them to improve customer experience by reducing RTOs as well as to deliver bulky items to customers where movement by lift was not possible. Shoulder and staircase trolleys have made home delivery easier and reduced customer cancellations. Pepperfry has also introduced an Automatic caller mechanism and the mobile application to confirm the delivery on the prescribed time and date and thus ensure that the delivery attempt is successful at the convenience of the customer. The company also tries to drive ownership to the last mile to solve delivery and accountability issues. Every driver and truck have an NPS for that date and route and can give reasons for why the retractors did not rate them well.

“There is substantial learning from the ecommerce distribution model that can be taken into other sectors to help the supply chain improve customer experience” according to Saurabh Jain, Director, Operations & Supply Chain Consulting, PwC.
Challenges faced by the logistics service providers and expectations from the Government to boost ecommerce

60% of the ecommerce orders in India are Cash on Delivery. “COD collection is a major challenge as the change is a big issue” according to Kamal Gupta, Senior Director, Delhivery. Cash reconciliation requires substantial manpower to deposit the cash in banks and in the ATMs. This is a challenge as banks are closed on second and fourth Saturday and charge a fee to deposit the cash. There should be Government initiatives to have more ATMs to deposit cash and have banks open over the weekends. The ecommerce companies should also partner aggressively with companies like Paytm to reduce the dependency on cash. DHL has come up with an all demand delivery model, the buyer can decide when he wants the delivery and where he wants the delivery. These initiative help track, improve and customize the last mile delivery options for the customer.

‘India’s cross border ecommerce is only $9 billion but is rapidly growing at 80%” remarked Sandeep, Vice President - Sales and Marketing, DHL Express India. Government and Indian businesses need to unlock the business potential outside India. For this, a key enabler would be increasing the ecommerce export value limit to Rs. 5 lakhs from the current Rs. 25,000 and beyond the current 3 ports and the 6 commodities. Automatic reconciliation with RBI & movement of information with DGFT and availing input tax credits more easily will help augment growth in cross border ecommerce.

Views of DGFT on the Government initiatives to aid the growth of ecommerce

“India’s fast growing ecommerce industry needed a consolidated policy to address the growing global and local needs” according to Dr. Prafulla Mishra, Statistical Advisor, DGFT. To have an overarching policy framework on ecommerce, a ‘Think tank’ headed by Mr. Suresh Prabhu was constituted in 2018 to recommend a national policy framework for ecommerce. Government officials as well as representative of ecommerce companies like Paytm, Make My Trip, Ola etc. technology companies like TCS, Jio and representatives from industry chambers are a part of this initiative. This think tank will define the guidelines of a comprehensive and transparent policy within 6 months. Since 2014, the Government has also launched campaigns around Digital India, Skill India and Make in India, giving a boost to eCommerce; looked at ways to encourage home-grown ecommerce players and has developed a domestic policy to respond to doubts raised by other countries on India’s stance on cross-border digital trade.

Key Highlights

- Earlier, e-commerce customers only wanted product and delivery reliability, but now- speed of delivery, trackability, flexibility and value added services are becoming core customer expectations.
  - An e-commerce player is using a point-to-point storage model, delivering inventory from a vast network of shoppers, instead of having large number of warehouses.
  - An e-furniture retailer has implemented various digital solution to reduce RTO and track shipments for greater accountability through in-house support models.
- Greater integration with digital wallets and government initiatives to ease banking operations is required to tackle challenges caused by Cash on Delivery (CoD) model in India.
- Government and Indian businesses need to unlock the potential of cross border e-commerce by expanding e-commerce export limit.
- Suresh Prabhu constituted a “Think tank” with government officials and industry representatives to recommend a national policy framework for e-commerce.
- The key enablers which will help the ecommerce industry to become a 200 billion $ industry by 2026 are; improving customer experience to make online buying quick and reliable, smartphone and internet penetration, and government support through policy enablers.
Creating an innovative M&E supply chain ecosystem to drive operational excellence

Panel Chair: Mr. Priyesh Chaudhary, Executive Director, PwC
Panelists:
Mr. Jayanta Chatterjee, Whole time Director- Supply Chain, Castrol India
Mr. Sanjay Mukherjee, Senior Director- Supply Chain Management, Whirlpool
Mr. Rajesh Mehta, CCSO & Executive Director, Liladhar Pasoo Group
Air Cmde Davinder Kumar (Retd.), Principal Director SCM, Indian Air Force
Mr. Piush Goyal, MD, Kelley Material Handling Equipment India

Operational excellence is of paramount importance for successful implementation of any business strategy. Organizations must focus on innovative manufacturing and supply chain operations across complex value chains to translate business strategies into sustainable practical plans – and this was the focal point of the panel discussion on Manufacturing & Engineering Supply Chain ecosystem.

Technology adoption in demand & supply planning

Panel highlighted the increasingly demanding consumer needs, which are putting pressure on production and supply chain functions for having the right product at the right time in the right quantity. While technology is helping organizations connect better with the customer and strengthen demand planning, focus is now shifting to integrated business planning with manufacturing and supply chain.

The panel unanimously stressed the importance of technology adoption to better meet customer expectations. Highly effective planning systems and mature planning processes are a significant advantage. Panel highlighted the importance of the same across B2B segments and integration of systems with suppliers and service providers.

Technology enables high quality and better post-sale service

Panel discussed the significant improvement in real time tracking and traceability for every component across the value chain. This has enabled organizations to tackle the quality challenge and improve efficiency. Real time component level performance and visibility has also enabled supporting spare part supply chains to be better prepared for post-sale service.

In aerospace and defense sectors, where precision manufacturing is very important, component level visibility and tracking has led to significant efficiencies and quality improvement.

“Our ability to connect with customer has improved drastically because we can track every pack out of 50 – 60 lac packs that leave the factory per week.”

-Mr. Jayanta Chatterjee, Whole time Director- Supply Chain, Castrol India
Panel discussed the rise in customer complaints due to better customer connect through innovative web based app solutions. This has ultimately forced organizations to shift focus from pure operational efficiency to performance centric metrics such as customer profitability, customer lifecycle value, net promoter score, defect rates, ticket resolution time etc.

Supply chain function evolving as value added function from a cost center

Panel discussed the growing importance of supply chains in the era of omni-channel strategies. Organizations are looking at service speed or lead time as a growth lever rather than just a planning lever. Integration of GPS based technology solutions have enabled service providers to measure metrics like number of halts, bad speed patches, average duration of halt, ultimately leading to better track of delivery performance.

“In today’s digital age, my customer won’t buy the product if I don’t deliver it on time. On time delivery promise contributes to the purchasing decision”

- Mr. Sanjay Mukherjee, Senior Director- Supply Chain Management, Whirlpool

Panel unanimously stressed on the fact that with simplified tax regime, businesses must now focus on achieving exemplary customer service and operational excellence in the most cost effective manner. GPS and RFID based IoT solutions are the backbone of this wave of supply chain innovation. Innovative solutions for simplification of processes is going to be the key for improving efficiency, and service providers will play an important role in bringing solutions to the industry. However, as per Industry 4.0 study by PwC, the transportation and logistics companies have been slow in adopting the new technologies. Organizations and service providers need to invest in talent, learning and culture along with technology to achieve these goals.

Key Highlights

- While technology has been leveraged relatively well for demand planning, there is greater need for technology adoption in the manufacturing and supply planning space to serve the increasing customer expectations.
- Real time component level performance and visibility has helped tackle the quality challenge and improve efficiency, especially in aerospace and defense sector where precision manufacturing is important.
- Increased visibility & traceability has forced organizations to focus on performance rather than operational efficiency alone.
- Organizations are looking at service speed or lead time as a growth lever rather than just a planning lever.
- Businesses need to focus on achieving superior customer service and operational excellence through technology like GPS & RFID based IoT solution.
Redesigning the battleground: Solving the FMCG & Pharmaceutical Supply chain challenge

Panel Chair: Manish Kumar, Director, PwC Pharma & Life Sciences Consulting
Panelists:
Mr Prasad Shidhaye – Director, Regional Operations Development – Johnson & Johnson Medical India
Mr Samir Chaturvedi – Asst. Vice President & Head Supply Chain – Patanjali Ayurved Limited
Mr Anirban Basu – Vice President & Head Supply Chain – Emami Agrotech
Ms Anusha Sharma – Director, O9 Solutions
Mr Hiren Ladva – National Head, Business Development – Future Supply Chain Solutions Limited

There are several mega-trends affecting organizational eco-systems today. Globally, the pace of technology breakthrough along with shifts in demographic profiles are disrupting business models and spurring innovation. The landscape is evolving in India as well, with the introduction of new tax and regulatory structures, greater adoption of technology and changing consumer expectations. As a result of these trends, there are several opportunities and challenges that Indian companies are facing today – which were the focus of the panel discussion ‘Redesigning the battleground; Solving the FMCG and Pharmaceutical supply chain challenge’.

Digitization & Innovation are increasing efficiency and reducing cost to serve

New technology opportunities are emerging that are making companies more efficient and reducing the cost to serve. In particular, panelists discussed significant improvements they have witnessed due to the rise of platforms that now provide end-to-end visibility of the company’s product, from the manufacturing plant to the consumer. Other benefits that were discussed were with the introduction of RFID and bar code scanners for inventory management. Though significant improvements have been witnessed, panelists felt there was a need for further investment towards digitization in supply chain. While investing in technology was recommended, panelists also raised caution that companies need to ensure that all prerequisites (processes, data capturing, manpower/capabilities etc.) for the realization of technology benefit are in place.

“Knowing all, seeing all and connecting all is a success mantra. Digitization and innovation is the key to achieving this success mantra” - Prasad Shidhaye

GST is a key change driver

With the introduction of GST last year, panelists agreed that there have been some early examples of benefits that some companies have realized, especially smaller and regional players, as the market has grown larger, with their reach increasing. This has led to greater adoption of technology in India as these smaller companies become sophisticated. There are other benefits that all companies have seen, particularly in the area of warehouse consolidation. With warehouse consolidation, companies’ investment in capabilities and technology increases as scale of operations increases. Examples were quoted in the areas of retail - Future Retail had 23 warehouses which has consolidated to 1 warehouse, operating out of 4lk sq. ft. catering to 8lk units shipped out on a daily basis.

This scale has forced Future Retail to adopt a CrossBelt Tray Sorter worth INR60Cr. This investment has paid off for FRL over a 3-4 year period.
There exist further opportunities for players to capture, and panelists believe that these will be developed in the coming years, particularly as capabilities involving skilled manpower and technology are enhanced. It was discussed that the government and private sector will have to work together on better implementation as well.

“GST has been an indirect enabler of technology adoption” – Hiren Ladva

**Evolution of service providers present several opportunities**

There are several changes that are being driven today by service providers, especially with the advent of 3PL (third party logistics) in India. Service providers are working towards providing extra value to customers through easier adoption of technology and introduction of new business models. For example – 3PLs are creating asset light models for the customer and helping protect the clients from vagaries in revenues. Apart from this, the larger benefits are accrued from multi-industry experiences and global expertise that 3PLs are bringing in, that are allowing companies to adopt digitization and innovation at a faster pace.

Further asks from panelists towards service providers were to understand exact customer needs and customizable offerings, workable in each and every city. Furthermore, the group discussed the need for synergies between 3PL, transporters and the client and possible integration of services. These synergies can help create and grow the trend of multi-user facilities in the country, thereby resulting in a lower cost to serve and a greater benefit to the customer.

“Service providers a key factor who can create a pan India network and bring global standards for Indian companies” – Hiren Ladva

**Customer is king**

Supply chain improvements are now enabling businesses to serve customers better and in a cost efficient manner. Panelists agreed that improvements made in supply chain to ensure customer service are now being translated to a better customer experience. This is being done through multiple touchpoints, understanding their needs better and leveraging data better. In particular, companies such as Emami Agrotech have worked on systems to ensure real-time information delivery to the customer that provides delight. The company has also initiated a War-room in the organization that communicates customer issues to each department and forces actions and steps to be taken to alleviate these issues.

“Customer service is now everyone’s responsibility in the organization, not just sales and marketing” - Prasad Shidhaye

**Key Highlights**

- An industry-wide impact of GST has been seen in the warehouse consolidation space, and with rising scale, investment in technology is increasing.
- Small & regional players have achieved early GST benefits by broadening their market reach and this has indirectly enabled technology adoption as these smaller companies becomes sophisticated.
- Rising adoption of digital solutions such as visibility platforms, RFID & bar code scanners are reducing the cost to serve and allowing companies to deliver better customer experience through multiple touchpoints and data insights.
- 3PLs are providing enhanced customer value by creating asset light models, integrating multi-industry and global best practices and enabling digitization and innovation.
- To achieve the true benefit of the structural changes, industry expects the government to improve infrastructure provisions, organized transport and urge them to involve businesses in policy formulation.
Panel Chair: R Lakshminarainan (RL), Director, Deals Strategy at PwC
Panelists: Partha Pratim Dey, National Manager Logistics, Nestle India Limited; Sanjay Kadaveru, Vice President & Founder, Action for India; Sanket Sheth, Managing Director, Elixia Tech Solutions Ltd.; Amit Dhume, National Head-Logistics, Hindustan Coca Cola Beverages Pvt. Ltd.; Rajesh Gupta, Head – Supply Chain, J K Tyre & Industries; Divya Bhouraskar, Supply Chain Lead, CNG Global; Mukesh Malik, Partner, ah! Capital Ventures; Manish Johari, Consulting Director, Maple Capital Advisors

The investor panel discussion was an interactive discussion about innovations in the current supply chain and logistics ecosystem, recent and evolving trends and investment opportunities. The panel had representation from logistics professionals from leading companies as well as strategic, social impact and financial investors and startups. The following 4 sub topics were discussed by the panel

Where does India lie in the logistics innovations and maturity curve?

The panel discussion started with the observation that logistics has always been touted as a potential sector for investors over the last 10 years. However, most financial investors (barring few) who invested in logistics over the last decade have not enjoyed great returns. The panel deliberated on the reasons for this anomaly. It was observed that several logistics startups have failed despite showing a great technological potential, as they face legal and organizational mindset hurdles. “In India, SCM in India starts after production dump” quoted Mukesh, Partner, ah! Ventures, indicating a lack of integrated view of supply chain available to SCM practitioners. He also indicated that many logistics service providers are unable to deal with the uncertainties caused by the infrastructure deficit prevalent regionally, as well as the lack of standards and compliance norms which leads to inability to commit and meet service levels onward to their customers. It was alluded that this creates significant hurdles in solving problems at scale as seen in developed economies and in creating investor value.

Hurdles to innovations in the supply chain and logistics ecosystem in India

“Companies look at supply chain as a soft underbelly and thus do not involve them in strategic decision making” quoted Deepa from CNG Global. Since logistics is seen as a pure cost center, most companies make vendor based decisions on price leading to lack of standardization in an un-organized transportation set up. Companies need to significantly collaborate with the startups to unearth long term gains in logistics costs and effectively upgrade the supply chain. A strong need for joint collaboration between the companies and the service providers is needed for seamless flow of information and data which could help to identify problems of supply chain, and encourage pioneering companies to solve them at scale, thereby also leading to innovative investments. The panel strongly felt that substantial investments are required in the logistics sector, both from the users and the service providers, which will bring along a change in the mindset towards supply chain and elevate it from a procurement to a strategic function in the companies.
Companies should identify inefficiencies in the supply chain and collaborate with startups to overcome these inefficiencies and achieve value for the customers through Digitalization, according to Partha Pratim Dey, National Manager Logistics, Nestle India Limited. “GST is forcing companies to think of logistics as a key differentiator” said Amit, Logistics head, HCCB. The panel also felt that the technology and the related disruptions have great potential for helping India evolve rapidly, but infrastructure in the country along with the mindset of the companies towards supply chain are major issues that need to be resolved.

What should be the role of the Government to promote innovations in the supply chain?

The panel unanimously agreed that in order to make supply chain a strategic function within any company, substantial Government intervention will be required to provide the necessary infrastructure support. The panel also felt that the government has a key role to play in skill development, and to ensure quality labour supply to the industry. An example was made of trucking and transportation that remains the heart of supply chain in India. For sustainable development, it was necessary to make trucking a favourable profession. Manish Johari, Consulting Director at Maple Capital Advisors commented that “The Government needs to make Trucking a profession where a person is proud of what he does” so that startups can engage with the transportation vendors to enable the supply chain functions to generate substantial value from the last mile delivery. Last mile delivery continues to be inefficient and has the maximum potential to impact the logistics costs, which can be improved only with the combination of meeting both infrastructure and skill gaps. The panel also recognized that the Government’s GST initiative will be a big disruptor of logistics in India and can further improve the supply chain efficiency if the cross border issues are resolved.

Key areas for investment opportunities for strategic and financial investors

All the panelists agreed that the last mile delivery has most scope for value creation. “Last mile challenges are from an infrastructure stand point and will continue till the market fragmentation is not corrected” quoted Mukesh, Partner at ah! Ventures. He also felt that very few startups were focused on load balancing, which is the major value driver to reduce logistics costs. “More and more innovative startups should focus on addressing supply chain issues to unearth commercialization possibilities in the livelihood sector” said Sanjay Kadaveru, Vice President & Founder, Action for India.

Overall the panel was very optimistic about the future of supply chain ecosystem in the country but felt that an organizational mindset change needs to happen with respect to supply chain to resolve the last mile delivery issues. This, along with Government support towards building infrastructure in the country can help reduce the logistic costs by 6-8% of the current product cost.

Key Highlights

- Logistics startups often fail despite technological potential due to legal hurdles, organizational setbacks, infrastructure deficit and lack of compliance norms.
- Business must view supply chain as a strategic function rather than a cost center, make adequate investments in digitalization and partner with startups to alleviate inefficiencies.
- Government has a key role to play in infrastructure support and skill development.
- Last mile delivery has most scope for value creation but has inherent infrastructure challenges that will continue till the market is fragmented.
- Startups could focus on load balancing, which is a major driver to reduce logistics cost.
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