

Home » Economy » Logistics

## 'Phygitalization' – The way forward in supply chain & logistics

March 31, 2023 - Updated 06:41 pm IST

Bridging the gap between digital offerings and physical space

BY SANDEEP SABHARWAL

COMMENTS SHARE

READ LATER



ADVERTISEMENT

Sandeep Sabharwal, Group CEO, Sohanlal Commodity Management Pvt. Ltd

Supply chain and logistics is an integral part for any business across sectors and by physitalizing the entire infrastructure will only allow businesses to stay ahead of the game. Embracing new-age technology platforms or a combination of them like Artificial Intelligence (AI), Machine Learning (ML), Internet of Things (IoT), Blockchain, RFIDs, Edge, etc. is the way forward for increasing efficiencies and optimising operations while reducing cost.

The Covid-19 pandemic can be said to be 'the catalyst and great accelerator' in the adoption of digitisation for businesses by embracing modern and emerging technologies, thus shepherding transformations in lifestyle, work patterns, and business strategies.

Even in the post-pandemic era, the economic environment globally has moved from VUCA (volatile, uncertain, complex, & ambiguous) to BANI (brittle, anxious, nonlinear, & incomprehensible) state due to the geopolitical situations in certain regions of the world. To stay competitive in this new business and economic environment requires new strategies and practices. Hence the digital

imperative to strengthen the supply chain and logistics infrastructure by bridging the gap between digital offerings and physical space (phygitalization) is of utmost importance.

### **Digital imperative**

Supply chain and logistics operation systems, that are being designed to flow in predictable patterns are now being digitised to do away with global disruptions. In the post-pandemic era, systems are designed to be more cognitive and integrated with diverse connected ecosystems. It can be said that the supply chain and logistics industry is experiencing its own '4.0' transformation as rapid digitalisation has become the norm.

The concept of 'glocal' (characterised by both local and global considerations) has already tightened its grip globally, an agile supply change management is the need of the hour as consumers have moved online and operate digitally. An overnight transformation of logistics has brought products to the consumer's doorstep.

### **Predictive Analytics**

For businesses, 'Predictive Analytics' through data-driven insights in smart dashboards is the new norm in supply chain management and logistics. It has emerged as a very powerful tool by leveraging data and analytics while making predictions with high accuracy about future demand and supply trends, thus enabling businesses to make informed decisions well in advance for production, inventory and distribution.

Predictive analytics combines historical data with real-time data and uses statistical methods for discovering trends and patterns, thus helping to forecast the future. This type of mature analytical framework has become very useful in business decision support for seamless supply chain management and logistics.

### **Case study in warehousing**

Considering the increasing pace of technology penetration, agribusinesses in the post-harvest segment primarily warehousing are deploying patented technology-based application with the sole purpose of ‘phygitalizing’ the entire warehouse management system. Such tech-enabled ‘phygital’ infrastructure are basically proprietary and patented applications that are enabling effective warehousing solutions agnostic of infrastructure, geography and produce while allowing real-time monitoring and management of produce. These technology-based applications are providing various post-harvest agriculture stakeholders (farmers, agri traders, and *arhtiyas*) with a diverse range of services like spot audit receipts, quality control, and surveillance along with geotagging of warehouses.

In a country like India, where the average post-harvest losses are said to be pegged at 10 per cent, with deployment of such tech-enabled proprietary and patented applications agribusiness in the warehousing segment has been able to reduce the post-harvest losses to a mere 0.5 per cent. Some of the case studies have been well documented and validated by leading Indian chamber of commerce and industry like FICCI. Deployment of such new-age technology applications has paved the way for new service models like ‘Farm-To-Fork’, ‘Farming-as-a-Service (FaaS)’, etc.

## **Conclusion**

In recent times, it is considered as responsibility of businesses towards the impact of its actions and operations on society, the environment, and its own financial well-being, better known as ‘TRIPLE BOTTOM LINE’ of people, planet, and profit. To remain ahead in business, embracing technology platforms and establishing digital presence is crucial for streamlining processes and driving efficiency. Digitising supply chain and logistics will ensure fulfilling end-user experience.

*The author is Group CEO, Sohanlal Commodity Management Pvt. Ltd.*