Disruptive Technology: Challenging the traditional Norms of Air Cargo business

The term disruptive technology was coined by American scholar Clayton Magleby Christensen to describe an innovation that creates a new market and value network and eventually disrupts an existing market and value network, displacing established market leading firms, products, and alliances. In the era of Information Technology where the entire world has emerged to become a potential marketplace, global entrepreneurs are adopting automation and digitization rampantly, making most of the legacy and traditional systems obsolete. Moreover, companies are also considering expansion in allied businesses so as to conduct holistic domain operations. IT has been the direct or indirect harbinger to several such drastic transformations in worldwide businesses. Though the Air Cargo industry is a relatively late entrant in this revolution, it has tremendous potential to adopt innovative and effective means of ensuring digital incorporation in business and operations.

Most of the Cargo business has been conducted on honour and paper basis since inception. However, this trend is now changing as companies are realising that technology has become a necessary evil to curb limitations and possible hindrances of this sector. Major air cargo carriers are brainstorming ways to get ahead of the digital disruption. The main reasons for this shift are; the ease of operations that digitization offers, the accuracy and real time information it offers and the fact that it can ensure CRM, something that logistics and supply chain providers are keen to achieve. Several disruptive technologies are being adopted by the Air Cargo players to offer radical services to their clients. These include using cloud, sensors, analytics, and digital business, among others. Organisations are differentiating themselves by offering speedy operations and establishing better control over operations. Some of the key trends observed in the Digital Disruption surrounding the Air Cargo industry are:

Sensors and integration: Digital data sensors that are integrated in the operational systems help Air Cargo providers to drive insights and manage business by exception. For example, sensors embedded throughout logistics supply chains can help to gain data into rules-based analytics engines resulting in insights and early warning of issues. RFID (radio frequency identification) sensors on items in a Cargo can help in prompt identification of lost, partially lost or sabotage of a shipment. Moreover, it can also help to track exact location of the missing Cargo. Such readily available data can help the Air Cargo carriers with insights that ensure customer promises are fulfilled even when there is disruption along the route.

Cloud-based technology: Cloud based services can deliver better speed and savings compared to traditional systems. As enhancement costs can be shared among clients of a cloud-based service, it can be made available at a lower price point than through traditional software. The community nature of cloud drives alliance from fellow Cargo players to tackle joint challenges such as facilitating a fully electronic supply chain, meeting new regulations and changing established ways of working across the industry.

Integrated Businesses: The advent of digitization in the Air Cargo domain has ensured that Air Cargo providers can easily integrate their systems with all stakeholders, Customs etc., globally. The turnaround time and the reach of this domain has been positively affected by this integration. As part of fully integrated system using XML, peer-to-peer apps and web services, they are able to incur cost saving and establish standard processes to conduct seamless business. Since most of these systems are now readily available on a Mobile platform via integration, the concept of conducting wireless business anywhere, anytime is creating breakthroughs in the Air Cargo sector.

Extension and Expansion: Another digital disruption that has engulfed the Air Cargo fraternity is the entry of allied businesses in the Air Cargo domain. With e-Commerce capturing global market, companies like Amazon, Alibaba etc., have extended their business in the Air Cargo sector to facilitate their growing business and lowering their freight and transport costs by hosting Cargo transport on their own accord. This move has challenged many smaller Air Cargo enterprises who view it as a potential threat to their sustainability.

In spite of legacy solutions offering priceless experience to the Air Cargo domain, the shift to modern disruptive technologies has become inevitable for all Air Cargo players. Not only are new entrants bringing additional competition to the existing players, they are in fact also bringing a myriad of new challenges with them. Traditional businesses are failing to compete with big data, platform service mentality, and a willingness to drive innovation and expansion in allied services. Though these constrains have posed sustainability threat to traditional players, they are not unattainable and is only a matter of changing the mind set and acknowledging the digital disruption to grow and survive.