



Another smart way for organizations looking for a holistic approach to optimize and automate the delivery of services to its customers is creating a smart supply chain. With increased exposure to shocks and disruptions, supply chains have grown more global and interconnected. **In dialogue with Capt. Pawanexh Kohli, Founder, CrossTree techno-visors, to understand what makes a Supply Chain Intelligent.**

## **What must companies do to innovate their Supply Chain strategy and approach?**

Innovation and strategy derived off it is one of the critical factors for a company to differentiate itself in the market. But to innovate one must have the basic data or information in place - starting from mapping the dynamics of both the source & the market, vehicular movement, storage capacity - utilization, past trends, demand variations, production centre dynamics etc. Intelligent analysis of such data will allow for differential planning and subsequent execution.

In case of cold supply chain faster reach to the market takes even more import as in this case, the supply chain is not just shipper of static value but one that directly impacts value realization. Domain expertise clubbed with BI could do wonders - Innovation is about understanding and intervening at right places and the most opportune time.

To truly innovate their strategy, a company must tap into product knowledge, ground impracticalities, see challenges as true opportunity and be dynamic and fleet footed – be Smarter!

## **How do you define a “Smart Supply Chain” in your industry? What are specific outcomes/ business benefits?**

I'd say an appropriately monitored supply chain that retains the flexibility to adapt as the smart supply chain. Smartness primarily comes from understanding the needs and requirements precisely and using technology to enhance the efficacy of intent. Prioritising on the intent – which varies with product specifics – will allow the supply chain to optimize both costs and profitability.

One main outcome would be Optimal utilization of available assets/resources; which would in turn increase the revenue; provide the required out-reach to the customer and be timely.

In case of time sensitive and environment sensitive cargos a smart supply chain would also require to avoid unwarranted downtimes of critical assets. A less than optimal supply chain, typically results in an opportunity loss; at times it could result in a total loss as in case of fresh produce or other cold chain cargos.

Businesses would also benefit from narrower event horizons, i.e. improved strategic planning, dynamic strategy deployments, faster or more assured results from planned outlays...Growth and intelligent scalability.

## How does IT integrate with Supply Chain?

One of the major problems that the nation faces right now is under utility of the available resources. Specifically in the cold supply chain, in my opinion most of the capacity built was with a specific product in mind (eg. Potatoes, Apples, Grapes, Frozen, etc). Yet, through intelligent use, and some design adaptation, the same capacity can be used across multiple products. This would of course require smart collaboration among the existing disparate players. Smart IT implementation can aid this disconnected and remote capacity by mapping a virtual network, which will allow the option of new supply links to take birth, thus leading to new market access & spread.

IT's role is very significant in making the supply chain smarter, domain expertise combined with IT will always make the system smarter. For example, IT's role in monitoring the supply chain is not just attaching GPS to actively monitor location, nor just to optimize routing or track billing. Smartly applied technology can tell of impending machine failure, can reduce energy waste, can make a supply chain operator pre-emptive by nature rather than post-facto in action.

To be truly and efficiently effective, the supply chain needs to be collaborative and shared across modes, regions and capacities. This unshackling of the supply chain, can only be affected through participative IT interaction.

I see the smart supply chain springing from a virtual collaboration platform where various parties have seamless & transparent access on available hard and soft resources. Just as IT has driven sharing across the global social fabric (the internet), I foresee it driving innovation and sharing across the physical global supply chain. It will of course first stitch companies together, then regions... before the global landscape is conquered.

IT's role helps all the 3 parties involved in the cold supply chain

- Produce owner - Track and Trace, Avoiding Wastage
- 3PL - Capacity Utilization, fulfill demand, lower costs
- Consumer - Product Safety, Quality and Access

**In our study with around 700 Chief Supply Chain Officers, we found their top concern to be "Supply Chain Visibility". What are your views on improving the visibility and what are the challenges you foresee?**

Visibility is utmost important and lack of transparency is a daunting problem. In specialized supply chain, for example the cold chain, visibility is not just tracing the movement of trucks/products but also visibility of the carriage or storage environment (temperature, air flow, gas levels) plus visibility of the machine parameters as key assets. Such visibility will ensure the supply chain delivers as intended and allow corrective action or risk mitigation to be truly effective. Visibility also improves both trust and compliance among the involved stake holders.

Connectivity across information exchange and smart use of available information is the major challenge I see. To overcome, we ensure transparency across domains, inviting product knowledge and participative culture – my theme will always be collaborate, much like we so unashamedly do in the social media.

The challenge is getting people to collaborate, between organizations and even within! The rewards of a participative working environment must be clearly communicated and measurable wherever workshare is involved. In understanding the impact, the individuals will aim for more than short term personal gain and work towards value creation and long term profitability.

If I may add, personally, my top concern for the supply chain is the cost impact to health and environment. All civilization thrives on logistics; and between the ships, aircraft, trucks and trains this industry is the major contributor to global pollution. This should really be the top concern for all supply chain leaders. A smart supply chain must aim to minimize such injury to our environment; nay....a smart supply chain must aim to reach environment sustainability.

## **India is one of the countries where the logistics cost is around 11-13% of GDP. Can you share your views on improving the efficiency of Supply Chain?**

The actual cost of logistics could be lesser and the inefficiencies exist across varied value pockets. One of the immediate areas where I see the cost could be brought down is through improved capacity utilization of the infrastructure. The cost incorporates empty running of vehicles and underutilized space; the asset owner seeking fair return on investment covers the fixed costs by overcharging the capacity user.

While supply chain activity is evident almost eternally, the lack of information and transparency of demand – stemming from natural competition in this largely unorganized ecosystem – only adds to this cost. Scaling up capacity of infrastructure, shared utility across users & service providers, government support in streamlining transactional costs & in reducing bottlenecks with clear and steady policy implementation will bring down the expenses.

We see symptoms of rapid change already – the plans for a dedicated freight corridor, the improved road network, development of world class Free Trade and Warehousing Zones, rapid transport systems like the metros, private rail networks, and the policy focus for implementation provided to all these initiatives are clear evidence of change. None of these can be fully effective and fulfill the scale of design, without smart technology in support.

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