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Issue 2

EXCELLENCE

# OPs InSights

Official Newsletter of Opcellence, MDIM



# MEET OUR MENTORS

Dr. Debasis Chanda brings in 20+ years of cross-functional experience in the IT industry and 5+ years of experience in the Engineering Industry. He is also certified as an Enterprise Architect by The Open Group (TOGAF).

His functional expertise also includes Strategy Consulting and Brand Building.

His industry expertise includes Government, Banking, Insurance, Communications, Media & Entertainment, Manufacturing & Logistics, Retail, Publishing, Pharma & Life Sciences. He also has Global Business exposure – Continental Europe, USA, APAC, Middle East and India.



**Dr. Debasis Chanda**

*Dean - Academic and Professor,  
Operations Management*



**Dr. Sunil Giri**

*Chairperson - PGDM and Associate  
Professor, Operations Management*

Dr. Sunil Giri did B. Tech (Electrical Engineering), MBA and PhD in Supply Chain Management. He has 14 years of rich experience in management teaching, training & consulting and research. His research interest is Sustainable Supply Chain, QR Logistics, Humanitarian Logistics, Supply Chain visibility, Lean manufacturing, Quality Management. He has taken training session in campus and in company MDP's conducted for executives/officers of various organizations. He has guided various Ph.D Scholars and had his name published in national and international Journals.



# ABOUT OUR CLUB

**OPCELLENCE:** The Operations club of MDI Murshidabad is the platform for students to harness their potential in the field of Operations Management.

The name is derived from the objective we desire to achieve i.e. OPERational exCELLENCE. OPCELLENCE is a hub where innovative ideas are garnered and nurtured for execution. Brainstorming, case discussions, simulation games, publications, quizzes, etc. are some of the activities conducted round the year to instill interest in the field of operations research and operations management.

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# THE FUTURE OF BIG DATA & AI IN LOGISTICS

*- Jessica Singh*

AI-powered technologies and Big Data can help organizations build true operational resilience in their supply chains. For example, with the right signals and data sources, organizations can anticipate labour shortage trends and preemptively evaluate the benefits of increasing inventory where needed. Furthermore, AI can help enable more seamless inventory management. For example, a manufacturer with geographically diverse suppliers, who monitors and identifies growing case counts in one region, could shift order commitments to a less impacted region while building safety stock. With the right data, mapping and monitoring, the supply chain team can evaluate conditions

faster and move more quickly to lessen costly impacts. Big Data and AI are both incredibly powerful capabilities; however they are predominantly limited to generating insight. An AI computer vision engine may be able to highlight defects in components invisible to the human eye. However, these insights are useless unless they are acted upon. With intelligent automation, we can not only commission insights without human instruction, but we can also act appropriately on the results.

The power not just to generate novel insights, but to act on them in real time gives us huge scope to navigate a complex supply chain landscape. It enables leaders to achieve greater operational productivity, agility, and resilience. This is more relevant than ever today, as we see businesses facing huge challenges, not just with the



worrying and ongoing lack of logistics capacity, but also shortages in a range of crucial raw materials such as silicon chips and sheet aluminum. Ultimately, AI, Big Data, and Intelligent Automation can all deliver multiple layers of value when applied to a single challenge or business issue, but it is when they are applied within the context of a top-down digital transformation programme that we really see the most significant benefits.

# Warehouse Management System

- *Vimlendu*

In any Supply Chain, Inventory Management and Warehousing form a part of operations intensive function and is one of the key building blocks in the entire chain. Most of the inventory is held at the warehouses as compared to the pipeline, and the efficiency of the warehouse operations will determine the further supply chain efficiency.

A distribution center or a warehouse is the key to the entire model as it holds the inventories and also manages other operations like bundling, packing, labeling, co-packing, kitting, etc. Most of the marketing and buyers requirements are met with from the warehouses. The time taken to detail the project and build a model taking into account all considerations will go a long way in ensuring operational efficiency of the supply chain.

## Physical Infrastructure

The building blocks or operational criteria of an ideal Warehouse Management System includes location, structure, roof height and flooring, design and layout external, internal layout design, storage infrastructure, material handling equipment, lighting and safety equipment and mechanisms, office infrastructure, IT and communications infrastructure, power and backup services and finally accessibility of the location and availability of labor.

## IT Systems

**The Warehouse Management System controls two sets of operations:**

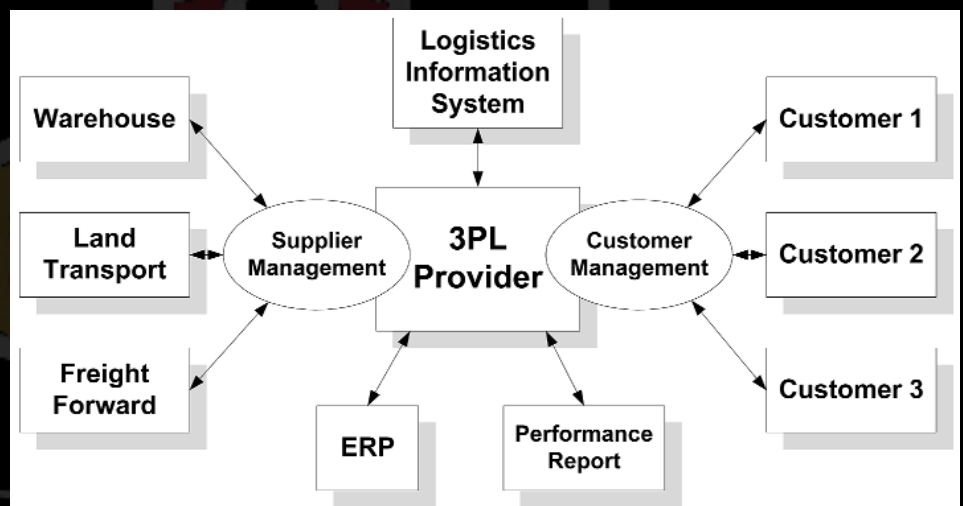
- **On the inventory front**, the system maintains inventory in the warehouse at Zone & individual location level, SKU level, pallet wise, carton wise and unit level inventories for multiple customers and allows specific inventory attributes and parameters to be built in to manage, allocate or block the inventory.
- **On the Operations front** the system manages, controls and directs all operations including receiving processes, put away processes, order processing, inventory allocation, picking process, packing process and finally shipment along with inventory updating. The intelligent system guides and helps operations manager to schedule and manage all operations for various groups and teams simultaneously.

# 3PL Service Providers

- Ishaar Alam

In any supply chain, these 3PL Service Providers further outsource certain functions and segments to many other local service providers. By the size of these companies 3PL logistics providers have built core competencies and capabilities in all of the functions namely Freight, Customs Clearance and Contract Logistics and are equipped with cutting edge technology to support international operations and provide visibility to the customers at all time. 3PL companies rely heavily on electronic exchange of data and information in their businesses. Today 3PL companies not only provide highly specialized inventory management and warehousing operations, but they also offer another value adds like Purchase Order Management, Semi, and Light Manufacturing, other value added services

designed for niche segments called as Integrated Logistics Services. 3PL service providers are today investing in building distribution networks and facilities to cater to the client's requirements.



SCM strategy of the company today aims at converting logistics cost to transactional cost and thus avoids any investments into managing Supply Chain. They are building in-house capabilities with employing SCM Experts to specialize in Automotive Logistics, Aero Spares, Medical & Environmental Logistics and other specific segments. It would not be possible for a principal company to invest in setting up and managing logistics services and facilities in origin and destination locations for its Supply Chain and manage local regulations etc. It is best left to the best Service Provider as the partner and leverage on his competencies and skill sets as is being done today

# Blockedge launches Blockchain-as-a-Service

- *Shubham Mehrotra*

Blockedge Technologies, a SecureCloud Technologies affiliate, has launched a blockchain network management tool.

According to IDC, enterprise blockchain spending will exceed \$6.6 billion this year, but adoption will be difficult. Some of the blockchain adoption problems faced by industry leaders include identifying and agreeing on the relevant use case, ability to construct and deploy scalable networks, interface with existing IT systems, and high-availability network maintenance.

In contrast to built-from-scratch manual solutions, Blockedge offers a streamlined plug-and-play BaaS platform. The Blockedge platform is zero-code, allows for the creation of iterative dApps, and supports multi-cloud and multi-chain. The platform allows advanced automation and is expected to expedite business transformation for corporations and consortiums alike, thanks to its UI-driven Blockedge Network Manager.

According to MarketsandMarkets, the global automotive blockchain market is expected to grow at a CAGR of 31.19 percent from \$350 million in 2020 to \$5.29 billion in 2030, while the global manufacturing & supply chain market is expected to grow at a CAGR of 53.2 percent from \$253 million in 2020 to \$3.2 billion in 2026. Blockedge is a blockchain technology platform that is only focused on speeding up blockchain changes. Blockedge, which offers a variety of products, solutions, and services, harnesses the power of automation to help organisations develop and implement global-scale blockchain networks in order to improve their operations. Blockedge is headquartered in New Jersey, with a knowledge centre in Chennai, India.



# TEAM OPCELLENCE

## BATCH 2020-22



Shikhar Prasad



Bhaskar Saha



Trinadh Koushik Burra



Kriti Chakraborty



Manthan Shrivastava

## BATCH 2021-23



Kankan Das



Shubham Mehrotra



Vimlendu Shekhar Mishra



Hazari Ishar Alam



Jessica Singh

*Let's turn our Factories to max efficiency level!*