Supply Chain Careers Adapting to a Digital Frontier

Dali Agrahari Prateek Singh

The world of supply chain management is not just about moving products from point A to B; it's an exciting puzzle where strategy, innovation, and resilience come together. This article intends to give you an exhaustive analysis into the incredible career opportunities this field has to offer

A smartphone in your hand, a cup of coffee on your table, or even the shirt on your body; these everyday items have traveled across the globe before reaching you. The global supply chain is an intricate web of manufacturers, suppliers, logistics, and distributors that ensure products are available when and where we need them.

Now, imagine a world where this web is disrupted. The COVID-19 pandemic exposed the vulnerabilities of global supply chains. Disruptions in



production, transportation, and distribution led to shortages and delays. Suddenly, "supply chain resilience" became a buzzword.

Resilience is the ability to bounce back from adversity, and in the context of supply chains, it means adapting quickly to disruptions. Achieving supply chain resilience involves strategies like diversifying suppliers, using advanced technology for real-time tracking, and maintaining strategic stockpiles.

But why is resilience so important? Think about the

climate change-related disasters, geopolitical tensions, or even the unpredictable nature of global events. Resilience ensures that the show goes on, no matter what. In the world's quest for supply chain resilience, the demand for skilled professionals has become more imperative than ever before.

Supply chain management has become a dynamic and multidisciplinary field that requires a wide range of skills including but not limited to areas such as Logistics, Data Analysis, Sustainability and Environmental Science, Digital Technologies like Machine Learning, Artificial Intelligence, Augmented and Virtual Reality, Risk Management, and Global Business Regulations.

Seizing the Opportunities

So, how do you seize the career opportunities in this everevolving field? Here's a roadmap:

 Education: There are many premier universities and institutions, both public and private, which offer degrees or certifications in supply chain

Continued on page 59

EN QUESTION OF THE WEEK

Readers' views elicited on important issues Last date for entry submission: 1/11/2023

FREE SUBSCRIPTION FOR WINNERS

Best entry on page 63

Continued from page 1

Supply Chain Careers- Adapting to a Digital Frontier

management, logistics, or related fields. These programs provide a strong foundation for your career.

Internships: Most often, internship is a mandatory component of a degree programme. It's a great way to learn the ropes and make connections.

Upskilling/Continuous Learning: Supply chain is a dynamic field, and the ability to
pivot and embrace new ideas is crucial. Staying updated with the latest trends and
technologies through online courses and workshops gives you an edge over your
competitors.

colleges and Courses

Here's an indicative list of colleges and institutes across India where you can pursue degrees in supply chain management and related fields. These institutions offer a variety of programs at both undergraduate and postgraduate levels, allowing you to tailor your education to your specific career goals. Whether you're interested in constitutions, supply chain management, or related fields, these colleges provide comprehensive courses to equip you with the knowledge and skills needed to excel in the industry.

Institution	Admission Mode	Qualification
School of Business, University of Petroleum and Energy Studies.	Merit-based and entrance exams (CAT, CMAT, NMAT, XAT, MAT, UPESMET)	Minimum 50% marks in 10+2 for UG Minimum 50% marks in graduation for PG
SASTRA University	Merit-based	Minimum 50% marks in 10+2
KL University	Merit-based	Higher Secondary/Intermediate (10+2)
Amity University	Merit-based and entrance exams (CAT, MAT, XAT, NMAT, GMAT)	Minimum 50% marks in graduation for PG
Dr DY Patil University	Merit-based	Minimum 50% marks in 10+2 for UG Minimum 50% marks in graduation for PG
Alagappa University	Merit-based and entrance exams	Minimum 50% marks in 10+2 for UG Minimum 50% marks in graduation for PG
Mysore University	Merit-based	10+2/ ITI/ Diploma/ 2-year pre-university course of Karnataka for UG Bachelor's degree for PG
Jain University	Merit and entrance test (JET)	Completion of 10+2 for UG Minimum 50% marks in graduation for PG
Indian Institute of Social Welfare and Business Management	Experience and Personal Interview	Bachelor's degree in Science, Commerce, Engineering for PG
Symbiosis Institute of Management Studies	Personal interview	Minimum 50% marks in graduation for PG
Loyola Institute of Business Administration	Personal interview	Minimum 50% marks in graduation for PG
Presidency University	Entrance examination (CAT/XAT/MAT/CMAT/ ATMA/KMAT)	Minimum 50% marks in graduation for PG
BIMTECH	Entrance test	Minimum 50% marks in graduation for PG

India's Focus on R&D in Supply Chain Management

Supply chains have become increasingly complex due to global competitiveness and economic crises. This complexity calls for innovative solutions and strategies to streamline operations, reduce costs, and enhance efficiency. As part of the Skill India initiative that aims to train Indians in different industry-related jobs and create an empowered workforce, the government has set up Centres of Excellence in Logistics and Supply Chain Management across the country. These Centres mainly focus on R&D for innovative solutions to help supply chain professionals adapt to evolving global dynamics, such as trade regulations, geopolitical shifts, and changing consumer Preferences.

The Centres of Excellence in Logistics and Supply Chain Management have been tasked to undertake Research and Development activities to make the logistics sector more cost-effective and competitive, generating new employment opportunities and boosting exports. Additionally, the Centres also aim to enhance India's engagement with global markets, expand outreach, and contribute to the country's economic growth.

The inception of the 'Centre of Excellence in Logistics and Supply Chain Management' signifies a monumental leap towards addressing the intricacies and Potentialities of this dynamic sphere. Armed with the latest in cutting-edge research methodologies, the Centres have embarked on a mission to unravel the intricate tapestry of contemporary supply chains, a landscape rife with complexities and nuances. The Centres do not merely engage in academic pursuits; they disseminate erudition of the highest order, enriching the intellectual milieu and fostering a deeper understanding of this multifaceted discipline.

Moreover, the Centres boast a commitment to nurturing a cadre of adept professionals, armed with the most contemporary insights and tools that the world of supply chain management has to offer. By means of meticulously crafted training programs, they aspire to mold individuals into experts of this field, ready to navigate its intricacies with finesse.

Furthermore, the Centres emerge as an advocate for the digital age, championing the cause of digitisation, analytics, and the integration of IoT and AI into the intricate web of supply chain operations. In doing so, they seek to fortify the capacity for real-

time monitoring and analysis, thus ushering in a new era of data-driven decision-making.

The Centres have been functioning with unwavering commitment to sustainability and the creation of green supply chains. Their research endeavors stand testament to this commitment, aligning seamlessly with global environmental aspirations and goals.

The Centres extend their arms in collaboration, forging partnerships with industry stalwarts, national bodies, and international organisations. Through these alliances, they aspire to nurture innovative solutions, meticulously tailored to meet the everevolving demands of the intricate supply chain-an arena that serves as the lifeblood of economic growth and global trade.

New Avenues in Supply Chain with Promising Career Growth Potential

Artificial Intelligence (AI): The Future of Supply Chain: In today's fast-paced digital world, speed is the name of the game in supply chain management. The ability to make quick decisions, reduce cycle times, operate with efficiency, and continuously improve processes has become paramount. Fortunately, Artificial Intelligence (AI) has emerged as a powerful tool to meet these challenges head-on, and it's here to stay, promising significant transformation in the years to come.

According to a global estimate, supply chain management firms anticipate doubling the level of machine automation in their processes over the next five years. Simultaneously, spending on Industrial Internet of Things (IIoT) Platforms is expected to grow from \$1.67 billion in 2018 to \$12.44 billion in 2024, indicating a remarkable 40% compound annual growth rate (CAGR) in just seven years.

The disruptions caused by the pandemic have vividly demonstrated the significant impact of uncertainties on supply chains, emphasising the importance of smart contingency plans to navigate through these challenges effectively. Learning AI can help supply chain professionals and aspirants tap into the following areas of specialisation having immense potential for career progress.

Accurate Inventory Management: Al-driven supply chain planning tools excel in handling vast amounts of data, enabling quick analysis and interpretation of datasets to provide timely guidance on supply and demand forecasting. Some advanced Al systems can even predict consumer habits and forecast seasonal demand, helping to minimise inventory costs while anticipating future customer demand trends.

Warehouse Efficiency: Al-based automation enhances the efficiency of warehouse operations. These systems can retrieve items from warehouses more rapidly and accurately than humans, simplifying complex procedures and speeding up work. This not only saves time but also reduces the need for a large workforce, resulting in cost savings.

Enhanced Safety: Al-driven tools can analyse workplace safety data, identify potential risks, and provide manufacturers with information to ensure worker and material safety. They can also record stocking parameters, update operations, and proactively address maintenance needs to ensure secure and compliant warehouses.

Reduced Operations Costs: Al systems minimise human oversight errors and workplace incidents, leading to error-free, high-productivity operations across various supply chain aspects, from customer service to warehouse management. Warehouse robots, powered by AI, offer increased speed and accuracy, ultimately reducing operational costs.

On-Time Delivery: By reducing dependency on manual efforts, Al systems streamline processes, making the entire supply chain faster, safer, and more efficient. This improved efficiency facilitates on-time deliveries to meet customer commitments, removing operational bottlenecks along the value chain.

Futuristic Job Roles in Supply Chain

The rapid pace of digitization, automation, and the integration of Artificial Intelligence (AI) and Machine Learning (ML) in supply chain management is reshaping the job landscape in this field. Several futuristic jobs and roles are emerging as a result of these technological advancements. Here are some of the key roles to watch for:

- 1. Al Supply Chain Analyst: These professionals leverage Al and ML algorithms to analyse massive datasets, uncover insights, and make data-driven decisions to optimise supply chain operations. They focus on predictive analytics and demand forecasting to reduce costs and enhance efficiency.
- 2. IoT Supply Chain Manager: With the growing use of IoT devices and sensors in supply chains, these managers oversee the implementation and management of IoT solutions. They collect and analyse real-time data from IoT sensors to improve inventory management, track shipments, and enhance overall visibility.
- 3. Blockchain Supply Chain Specialist: As blockchain technology gains traction in supply chain management, specialists in this field ensure the secure and transparent recording of transactions and events throughout the supply chain. They focus on traceability, authenticity, and compliance.
- 4. Supply Chain Automation Engineer: Automation engineers design, develop, and implement robotic and automation solutions within warehouses, distribution centers, and manufacturing facilities. They work on automating repetitive tasks, optimising material handling, and increasing operational efficiency.
- 5. Data Scientist: Data scientists in supply chain management use advanced statistical and machine learning techniques to extract valuable insights from large datasets. They help in optimising supply chain processes, improving demand forecasting, and making strategic decisions.
- 6. Supply Chain Sustainability Manager: Sustainability is becoming a critical concern in supply chain management. These managers focus on making supply chains more eco-friendly by reducing carbon footprints, minimising waste, and ensuring ethical sourcing practices.
- 7. Supply Chain Digital Transformation Leader: These professionals drive the digital transformation of supply chain processes within organisations. They identify opportunities for automation, AI, and ML integration, and oversee the implementation of digital technologies.
- 8. Supply Chain Cybersecurity Analyst: With the increasing reliance on digital systems and data exchange, cybersecurity analysts focus on protecting supply chain networks from cyber threats and ensuring the integrity and confidentiality of data.
- 9. Augmented Reality (AR) and Virtual Reality (VR) Supply Chain Specialist: AR and VR technologies are being used for training, maintenance, and visualisation in supply chains. Specialists in this field work on implementing AR/VR solutions for tasks such as remote maintenance and employee training.

 Continued on page 60



Publications Division Ministry of Information & Broadcasting

Associate yourself with the Government's largest publishing house

Grab the opportunity for ATTRACTIVE REGULAR INCOME by becoming a distributor of our popular journals and Employment News

Getting distributorship ensures

✓ 100 % secure investment ✓ Instant income **Guaranteed profit**

🖊 Association with established brand 🔀 Minimum investment – Maximum profit

Benefits for Employment News Distributors

No. of Copies	Discount in sale price
20-1000	25%
1001-2000	35%
2001-More	40%

Benefits for Journal Distributors

No. of Copies	Discount in sale price
20-250	25%
251-1000	40%
1001-More	45%

Easy to become a distributor

- Educational qualifications NOT REQUIRED
 - Business experience NOT REQUIRED
- Minimum investment three times the amount of initial purchase (for journals)



Contact

Employment News Phone No.: 011-24365610

E-mail: sec-circulation-moib@gov.in

Phone No.: 011-24367453 E-mail: pdjucir@gmail.com

Address: Employment News, Room No. 779, 7th Floor, Soochna Bhawan, Lodhi Road, New Delhi-110003

Continued from page 57

Employment News @

Other Instructions:

- Interested candidates who fulfill the prescribed conditions may apply to the Chairman, Institute of Hotel Management, Catering Technology & Applied Nutrition, Near M.S. Building & SKSJI Hostel, SJP Campus, Bangalore -560
- Subscribing on the top of the envelop application for the post of Principal, IHMCT&AN, Bangalore, within 30 days from the date of publication of this advertisement. In case of delay in forwarding the application through respective department, advance copy along with all the documents must reach within the
- 3. Application form in the prescribed format is given on the Institute website: www.ihmbangalore.kar.nic.in to be sent with complete latest bio-data along with self-attested copies of certificates and recent passport size photograph.
- The application form without enclosure of self-certified supported documents/ testimonials or incomplete will be rejected.
- The candidates employed in the Govt./Quasi or Semi Govt./Autonomous Organizations who are applying for the post on direct recruitment basis, must apply through proper channel.
- No TA/DA will be paid to the candidate who will be called for interview.
- Any corrigendum/addendum etc. to this advertisement will be issued only on 7. Institute's website as above. Applicants are advised to visit the Institute website regularly for any updates/important dates:
- The Institute reserves the right to shortlist the application/ fill or not to fill vacancy 8. or to re-advertise the post without assigning any reason.
- The Institute will not be responsible for postal delay. 9.

Note: Selection process for the above post is subject to final order on the O.A vide No. 170/00125/2023 submitted at Honorable CAT, Bangalore. EN 30/43 PRINCIPAL / SECRETARY Continued from page 59

Supply Chain Careers- Adapting to a Digital Frontier

10. Supply Chain Network Designer: supply chain risks. These professionals use advanced modeling and simulation techniques to design and optimise supply chain networks. They assess factors like transportation routes, warehouse locations, and production facilities to enhance efficiency and reduce costs.

11. Supply Chain Al Ethics Officer: With the increasing use of AI, ethical considerations become essential. These officers ensure that AI and ML algorithms are used responsibly, ethically, and in compliance with regulations, mitigating potential biases and risks.

12. Supplier Relationship Manager (SRM) 2.0: SRM professionals are evolving into more strategic roles, using data analytics and Al-driven insights to strengthen supplier relationships, optimise sourcing strategies, and mitigate

13. Supply Chain Digital Twin Manager: Digital twins are virtual replicas of physical supply chain components. Managers in this role use digital twins to simulate and optimise supply chain scenarios, enabling better decisionmaking and risk management.

The future of supply chain management undeniably tech-driven, professionals in this field need to adapt to these changes by acquiring digital skills, data analytics expertise, and a strong understanding of emerging technologies. (The authors are career coach for science and technology related entrance exams. Feedback on the can be sent feedback.employmentnews@gmail.com) Image courtesy: (iStock Images) Views expressed are personal.