



NITIE

National Institute of
Industrial Engineering
Mumbai - India

GLOBAL ONLINE CERTIFICATION COURSE ON

SUPPLY CHAIN & DEMAND ANALYTICS 2022

In collaboration with



PROF. DAVID SIMCHI-LEVI

MIT Professor, Business & Supply Chain Analytics
Director, Data Science Lab
Massachusetts Institute of Technology, USA



PROF. MANOJ K. TIWARI

Director, NITIE Mumbai

Course Timeline

14th May to 5th June, 2022
(Saturday & Sunday)

5:00 PM to 7:30 PM (IST)





ABOUT THE COURSE

Demand analytics is at the core of supply chain operations that helps in delivering products and services efficiently and effectively. Using data analytics, enterprises can leverage multiple demand data to gain critical insight and future prospects. The ability to use data effectively to drive rapid, precise, and profitable decisions has been a critical strategic advantage for companies as diverse as Walmart, Google, Nike, Capital One, and Disney. For example, Capital One uses sophisticated analytic capabilities to match credit card offerings to customers and WalMart uses analytics to monitor and update its inventory in a way that allows it to serve its customers at an exceptionally low cost.

After tremendous success of Business and Operation Analytics-2022, NITIE is proud to present the Global Online Certification Course on 'Supply Chain and Demand Analytics 2022' in association with Prof. David Simchi-Levi (MIT, USA).

This course emphasizes the recent trends in supply chain and competencies required to handle it, how supply chains are transforming through digitization and automation, use of machine learning techniques for informed decision-making. Another important focus is to understand supply chain resilience in face of disruption such as COVID-19, Ukraine War, US-China Trade War etc. and the role of demand analytics in tackling supply chain issues.

We have three goals in this course. The first is to identify opportunities as well as prioritize those opportunities in creating values through digitization, analytics and automation. The second is to drive automation through network and production optimization. The third is to apply demand analytics to increase sales by improving forecast accuracy.

Supply Chain and Demand Analytics being an integral part of modern management, this course should provide you with the foundation to understand the impact of disruption and apply analytical methods to address supply chain issues under the dynamic environment.





FOCUS



- Supply Chain Trends
- Supply Chain Competency
- Machine Learning based Technology
- Digital Supply Chain Transformation
- Supply Chain Resiliency
- The Impact of COVID-19
- The US-China Trade War
- The Ukraine War on Supply Chains

- Identify opportunities for creating supply chain value using digitization, analytics and automation
- Prioritize the opportunities provided by the technology trends: digitization, analytics and automation
- Drive automation through network and production optimization
- Increase sales by improving forecast accuracy
- Apply data analytics to improve new product introduction
- Organizational structure and change management

COURSE OUTCOME





COURSE STRUCTURE

- 14th May '22 - 5th June '22
- 5:00 PM - 7:30 PM IST || Saturday & Sunday
- 20 Hour Course - 4 Weeks
8 Sessions (2.5 Hours/Session)
- Mode of Instruction-Live via WebEx
- Upon completion of the course, all registered participants will receive a Certificate of Completion from NITIE signed jointly by Prof. David Simchi-Levi and Prof. Manoj K Tiwari
- Attendance & course participation would be the criteria for course completion
- Lecture Slides & Supplementary material will be shared after each session



COURSE CONTENT

Week 1

- Welcome and Introduction
- Understand industry trends affecting change
- Explore how Data, Analytics and Automation improve business performance
- Understand the relationship between Customer value proposition and operations strategy
- Understand Supply Chain Dynamics
- Identify strategies to control the Bullwhip Effect
- Case Studies: PC Manufacturer, Fashion Retailer

Week 2

- Supply Chain Integration and Push-Pull Strategies
- A Framework for matching supply and demand
- Driving Value through Complexity Reduction
- Case studies: CPG, Dell, Zara

Week 3

- Supply Chain Segmentation
- Smart S&OP, Smart Execution and Control Tower
- Develop a roadmap for a successful supply chain digitization: The Journey to Success; Organizational structure; Change Management
- Apply the Risk Exposure Index to identify the level of your Supply Chain Resiliency
- Supply Chain Flexibility and Redundancy
- Case Study: Ford, CPG, High Tech

Week 4

- Develop a Unified View of Demand
- Understand how to integrate internal and external data
- Develop and Effective demand forecasting process that brings together supply planning, financial planning, sales and trade planning
- Understand effective mechanisms to insure adaptability
- Case Study: CPG, Fashion Retailer





ABOUT NITIE

- National Institute of Industrial Engineering (NITIE), established in 1963 by the Government of India with the assistance of United Nations Development Project (UNDP) through the International Labour Organization (ILO), is one of the leading institutes for Management education
- It has proven its excellence by continuously being featured in India's best B-schools list and was ranked 11th in the most recent Business Today Survey
- NITIE, a pioneer in Industrial Management has been positioned 12th amongst management schools in India by National Institutional Ranking Framework (NIRF) in 2020.
- NITIE, widely known as the leading Institute in the area of Supply chain and Operations, holds a purpose in advancing the transformative education and industry inspired research in different domains thus dedicating itself to help Indian businesses to make their presence felt globally
- It has a strong linkage with private and public sectors, national research institutes, other academic institutions, universities, government organizations, and communities
- The institute has decided to act as a driving force not only in the manufacturing sector but all dynamic sectors of the Indian economy
- It has aligned its vision and activities in line with the current and future needs of the Indian industries making them vibrant and influential globally





COURSE INSTRUCTORS

Prof. David Simchi-Levi

MIT Professor, Business & Supply Chain Analytics
Director, Data Science Lab
Massachusetts Institute of Technology, USA



- Prof. David Simchi-Levi is the Professor for Business & Supply Chain Analytics and the Director of Data Science Lab at Massachusetts Institute of Technology, USA.
- He is the Editor-in-Chief of the INFORMS journal, Management Science, the former Editor-in-Chief of Operations Research, Naval Research Logistics and a member of the board for several scientific journals including Transportation Science and Telecommunication Systems, and a former Area Editor of Transportation for Operations Research.
- He is the most renowned Professor and Thought Leader in the field of Supply Chain Management and also serves as the Editor-in-Chief of Management Science. He is the recipient of the prestigious INFORMS Impact Prize 2020 for his work on Supply Chain Resilience.
- Prof. Simchi-Levi founded LogicTools, now a subsidiary of IBM, which provided software solutions and decision support systems to clients such as Caterpillar, ConAgra, Kraft Foods, Mercer Management, Ryder, SC Johnson, UPS, U.S. Postal Service, Walgreens, etc., and later co-founded OPS Rules, and Opalytics, both now part of Accenture.
- Prof. David Simchi-Levi had associated with NITIE for the Global Online Certification Course on Supply Chain Digitization & Management in 2021 which was a highly successful course with over 2500 participants from 13+ countries.
[\(Read more\)](#)
- MIT profile - https://cee.mit.edu/people_individual/david-simchi-levi/
- LinkedIn Profile - <https://www.linkedin.com/in/david-simchi-levi-3045026/>





COURSE INSTRUCTORS

Prof. Manoj K. Tiwari

Director, NITIE Mumbai



- Prof. Manoj K Tiwari, Director-NITIE, is on-lien from his post as Professor, Department of Industrial and Systems Engineering at Indian Institute of Technology, Kharagpur.
- He has been ranked 1 among top 100 individual researchers across the world who had published research articles in International Journal of Production Research (1985-2010), the top leading author for Supply Chain Analytical Techniques (Computer & Industrial Engineering), among Top 20 most productive authors in the area of Production and Operations Management in the last 50 years (Int. Journal of Production Economics, 2009) and rated 2nd among many researchers working in Logistics and Supply Chain Management in India (Analysis of the logistics Research in India-White paper published in TU Dortmund University, Dortmund Germany-2012).
- He is the recipient of “Most Influential Researcher Award” in the domain of Operations and Supply Chain Management.
- Optimization, Simulation and Computational Intelligence are the main techniques adopted by Prof. Tiwari to automate the decision support system for complex and large-scale problems in Manufacturing and Logistics System.
- Profile on NITIE Website - <https://www.nitie.ac.in/about-director>
- LinkedIn Profile - <https://www.linkedin.com/in/manoj-tiwari-5050a634/>





COURSE FEES

For Individual Registrations:

Category	Fee Category	Registration Fee (incl. of all)*
Participants from India	Industry Professionals	INR 20,000/- per participant
	NITIE Alumni	INR 18,000/- per participant
Foreign Participants	Any	USD 400 per participant

* Convenience Charges may apply.

For Bulk Registrations from one organization:

Category	Fee Category	Registration Fee (incl. of all)*
Number of Participants		Registration Fee (incl. of all)
Above 10		INR 16,000/- per participant

* Convenience Charges may apply.

Please write a mail to demandanalytics@nitie.ac.in for more details on bulk registration.





SUCCESS OF NITIE'S GLOBAL COURSES

Supply Chain Digitization and Management (16th Jan '21 – 21st March '21)

2500+
Participants

13+
Countries

250+
Organizations

1000+
Professionals

[Click here](#) to download the course report

End-to-End Supply Chain Transformation through Digitization (13th Nov '21 – 5th Dec '21)

350+
Participants

9+
Countries

110+
Organizations

EXCLUSIVELY
Industrial
Professionals

[Click here](#) to download the course report

Participating Organizations

Educational Institutions



Corporates





SUCCESS OF NITIE'S GLOBAL COURSES

Business and Operations Analytics 2021 (3rd Jul '21 – 5th Sept '21)

3000
Participants

17
Countries

350+
Organizations

700+
Professionals

[Click here](#) to download the course report

Business and Operations Analytics 2022 (12th Feb '22 – 13th Mar '22)

1500+
Participants

6+
Countries

290+
Organizations

335+
Professionals

[Click here](#) to download the course report

Participating Organizations

Educational Institutions

Corporates





SCDA 2022 COORDINATING TEAM

[Click here](#) for FAQs

For all queries, please email to demandanalytics@nitie.ac.in

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