

GLOBAL ONLINE
CERTIFICATION COURSE ON

# END-TO-END SUPPLY CHAIN TRANSFORMATION THROUGH DIGITIZATION

IN COLLABORATION WITH
CENTER OF EXCELLENCE IN LOGISTICS AND SUPPLY CHAIN MANAGEMENT

COURSE TIMELINE

13<sup>TH</sup> NOV 2021 TO  $5^{TH}$  DEC 2021

5:00 PM TO 7:30 PM IST || SAT-SUN

Course Instructors



#### PROF. MANOJ K TIWARI

**Director, NITIE Mumbai** 

#### PROF. DAVID SIMCHI-LEVI

MIT Professor - Business & Supply Chain Analytics

**Director, Data Science Lab** 

Massachusetts Institute of Technology, USA







Digital Transformation, which refers to the use of Data, Analytics and Automation, has been applied by a few innovative companies, from Apple to Amazon to Dell, to transform their businesses and achieve significant increase in revenue and profit while decreasing costs. In all these cases, the objective is to apply business analytics to transform the way the organization manages it business, from manufacturing, supply chain, marketing, and revenue optimization all the way to understanding consumer's preference and innovate new products. This digital disruption is now motivating many companies in a variety of industries to reinvent their supply chains, from demand and supply planning to production and distribution.

NITIE is proud to present yet another Global Online Certification Course on 'End-to-End Supply Chain Transformation through Digitization' in association with Prof. David Simchi Levi (MIT, USA) under the leadership of Prof. Manoj Tiwari (Director, NITIE). This course is launched under NITIE's Centre of Excellence in Logistics and Supply Chain Management which aims to develop India's logistics sector through applied research and industry outreach to tackle real-time business scenarios.

This course introduces Professor Simchi-Levi of MIT unique framework that combines the three technology trends, Digitization, Analytics and Automation to reinvent the supply chain.

#### Participants will gain a deeper understanding of

- (i) applications of these trends to improve efficiency, profitability and growth;
- (ii) the required processes to improve supply chain visibility, flexibility and resiliency; and
- (iii) the appropriate organization and talent change.







## **Focus**

Supply Chain Trends Supply Chain Competency Machine Learning based Technology Digitization
Supply
Chain
Transformation

Supply Chain Resiliency & COIVD-19 Impact

Practical Cases

# **COURSE OUTCOMES**

By the end of this course you would be able to:

Identify opportunities for creating supply chain value using digitization, analytics, and automation

Learn how to drive automation through **network** and **production optimizatio**n

Understand how to increase sales by improving forecast accuracy

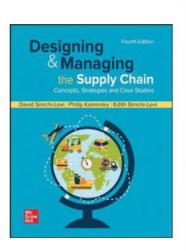
**Prioritize the opportunities** provided by the technology trends: digitization, analytics and automation

Explore how to apply data analytics to succeed in new product introduction



## **COURSE HIGHLIGHTS**

- This course is designed **Exclusively for Industry Professionals** and Corporate groups with a keen interest in SCM and Digitization.
- Participants will get the opportunity to interact live with Prof. David Simchi Levi.
- Gain 1 year of exclusive digital access for course participants (First time in India) to the 4th and latest edition of the reference book, "Designing and Managing the Supply Chain: Concepts, Strategies, and Case Studies" by Prof. David Simchi-Levi which will aid the learning during lectures.
- Learn key concepts & trends through exhaustive cases studies & recent happenings in the industry.
- Lecture Recordings will be shared for the Course Duration

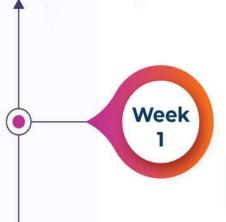


## **COURSE STRUCTURE**

- 13th Nov'21 5th Dec'21
- 5:00 PM 7:30 PM IST || Sat & Sun
- 20 Hours Course | | 8 Sessions (2.5 Hours/Session)
- Mode of Instruction Live via Online Platform
- 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
- Lecture Attendance and Course Participation will be the criteria for Course Completion
- Lecture slides and supplementary material will be shared after each session

#### **COURSE CONTENT**





Week

#### **Supply Chain Fundamentals**

- Introduction and Course Overview
- Customer Value and Operations Strategy
- Controlling the Bullwhip and the Value of Information
- Supply Chain Integration
- · Push-Pull Strategies
- Supply Chain Segmentation

**Cases:** Global reatiler, PC Manfacturer, CPG Network Opt., High-Tech Manufacturer

#### **Supply Chain Digitization**

- Big Data Analytics for reengineering business processes
- Supply Chain Digitization: Unified view of Demand,
   Segmentation, Smart S&OP, Smart Execution
- Creating your digital roadmap
- Prioritization Guidelines
- Transformation Roadmap
- Developing an effective solution architecture

Cases: Global reatiler, CPG Transformation



#### Supply Chain Resiliency

- The Risk Exposure Index
- Supply Chain Flexibility
- Supply Chain Redundancy
- Inventory Management Strategies

**Cases:** Automotive Manufacturer Risk Management Strategy, Risk Management at Energy and Automation Manufacturing Company



#### Supply Chain Sustainability

- Network Planning
- Sustainable Supply Chain as a source of competitive advantage
- Supply Contracts and Risk Sharing Strategies

**Cases:** CPG transformation through flexibility (PepsiCo), CPG transformation through redundancy, Supply Chain Sustainability at a large CPG company



# **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
- NITIE, a pioneer in Industrial Management has been positioned 12th amongst management schools in India by National Institutional Ranking Framework (NIRF) in 2021



• NITIE, widely known as the leading Institute in 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

# ABOUT NITIE'S CENTRE OF EXCELLENCE IN LOGISTICS AND SUPPLY CHAIN MANAGEMENT

- Shri Piyush Goyal (Minister of Commerce & Industry, Consumer Affairs & Food & Public Distribution and Textiles, Government of India) inaugurated the Centre of Excellence in Logistics and Supply Chain Management at NITIE, Mumbai on 23rd September 2021.
- This center will act as a driving force to train and launch top quality programs to disseminate advanced knowledge and promote Digitisation, Analytics, and IoT Application and Decision Support Systems



through Artificial Intelligence and Machine Learning applications and Digital Twin and Control towers, to strengthen the monitoring and analysis of complex logistics operations.

- It will help the logistics sector become more cost-effective, make the sector more competitive, create new jobs, export more, engage better with the world markets, expand outreach and bring more economic activity to India
- Read More Here







#### **ABOUT 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 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.
- 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.
- His book, "Designing and Managing the Supply Chain" (with P. Kaminsky and E. Simchi-Levi) is a staple across B-schools for their Supply Chain Management courses.
- He has been chosen as the recipient of the prestigious Impact Prize by INFORMS for his
  research on Supply Chain Resilience that exposed the flaws in supply chain decision making
  as he continues to work on developing Stress tests for companies to cope with Covid19
  disruptions in their supply chains. This publication on the need for stress tests to evaluate
  supply chain resilience, which has become a reference to many industries, is a gamechanger
  in the domain of supply chain in the post-covid era.
- He is the founder and chairman of LogicTools which provided software solutions and professional services for supply chain optimization. The company has provided decision support systems to clients such as Caterpillar, ConAgra, Kraft Foods, Mercer Management, Ryder, SC Johnson, UPS, U.S. Postal Service, Walgreens, etc. and was acquired by IBM.
- Prof. David Simchi-Levi had associated with NITIE for the Global Online Certification Courses on Supply Chain Digitization and Management as well as Business & Operations Analytics in 2021 which were a highly successful courses with over 2500 participants from all over the world in each course.
- Profile on MIT website <a href="https://cee.mit.edu/people\_individual/david-simchi-levi/">https://cee.mit.edu/people\_individual/david-simchi-levi/</a>
- LinkedIn Profile https://www.linkedin.com/in/david-simchi-levi-3045026/









- 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.
- His research and teaching interests are in modelling the Manufacturing Processes and Operations analysis in Supply Chain Networks.
- 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.
- LinkedIn Profile <a href="https://www.linkedin.com/in/manoj-tiwari-5050a634/">https://www.linkedin.com/in/manoj-tiwari-5050a634/</a>
- Profile on NITIE Website <a href="https://www.nitie.ac.in/about-director">https://www.nitie.ac.in/about-director</a>



#### 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):

# Number of Participants Registration Fee (incl. of all)\*

Above 10 INR 16,000/- per participant

Please write to us on digitalscm@nitie.ac.in for more details on bulk registrations.

\* Convenience Charges may apply.

**Industry Professionals** 



# शामाह ज्योग प्रगति

## **SUCCESS OF PREVIOUS COURSES**

- NITIE has successfully completed 2 versions of the Global Online Certification Course on Supply Chain Digitization and Management, and Business and Operations Analytics in association with Prof. David Simchi- Levi in 2021.
- Both the courses received an overwhelming response with 2500+ individuals in both the courses from reputed national and international organizations. Some prominent academic institutions include the IITs, IIMs, IIFT, University of London, University of Warwick and some eminent organizations include P&G, HUL, GE, ITC, Amul, Deloitte, General Mills, IBM, Titan, Reliance, PwC and many more.

To read more about the Global Online Certification Courses, Supply Chain Digitization and Management - <u>Click here</u> Business and Operations Analytics - <u>Click here</u>

# GLOBAL ONLINE CERTIFICATION COURSES FROM NITIE





Corporates

#### **Educational Institutions**







## PREVIOUS COURSE TESTIMONIALS

Thanks NITIE to collaborate with MIT & Prof. David Simchi-Levi & Prof. Tiwari who ensured that we get state-of-the-art SCM techniques and the best practices that Organizations across the world have implemented. What worked for them and what did not and why! As we are on our journey to transform the global supply chain at Micron, these insights will come handy. Very well focused and organized 20 sessions!

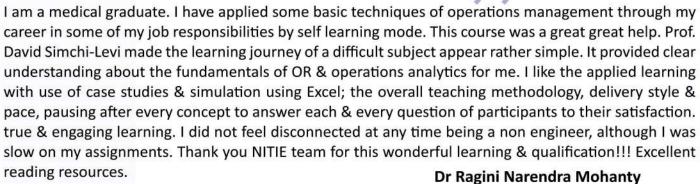
Mr. Amol Ashtikar

Sr. Manager - Global Supply Management

Micron Technology

It was a good course and content was excellent, "Use Cases" shared during the course were very relatable and was the USP of the course. Overall a very good course! Thank You.

Mr. Mayur Karekar Associate Director KPMG



VP Emerging Technologies and ERP, Professor

S. P. Mandali's WeSchool



Professor David taking his time to explain the concepts supported by examples and then taking frequent breaks in between to check if participants have understood or any clarification was required.

Mr. Sandeep Kumar Mishra General Manager Jio Platforms Limited Everything about the course was perfect. The course execution by NITIE and explanation by Prof. David was always bang on target. The presentation, study material, quizzes and above all the knowledge imparted. There were tremendous learnings and takeaways from the session. Hoping to attend more such sessions. I am enlightened and I am looking forward to more such sessions. The pandemic was a blessing in disguise as I got to attend lectures from Prof Simchi levi- A thought leader in supply chain. Thank you NITIE, Prof. Simchi-Levi and everyone at NITIE for all their efforts in organizing this course.

Priya Figueredo

Manager - Supply Chain Management

Cipla





# COORDINATING TEAM

For all queries, please email to <a href="mailto:digitalscm@nitie.ac.in">digitalscm@nitie.ac.in</a><a href="mailto:click here">Click here for FAQs</a>

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Prof. Debabrata Das

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Ms. Aayushi Kumari Yadav

Mr. Rutvik Ghiya

Mr. Shibi Chakravarthy

Mr. Dhiraj Tamgadge

Mr. Nishant Kumar Singh

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