Learnbay

Supply-chain, E-commerce & Retail Domain

Domain Specialization & Project Expertise

Supply-chain, E-commerce & Retail

6 Industry Relevant Projects

20+ Case Studies & Assignments

100% Interview Guarantee

✅ Gain expertise in software development for efficient supply chain management, empowering seamless operations and optimized logistics.

✅ Acquire specialized skills in e-commerce and retail software development, enabling enhanced customer experiences and increased sales.

✅ Develop comprehensive knowledge in building software solutions that integrate supply chain, e-commerce, and retail domains seamlessly.

Who Can Apply?

Executive level Professional

Working professionals with a mid-level experience in the software development domain can excel as an executive-level supply chain & retail professional

Professionals interested in banking & finance sector

Aspiring individuals interested in the supply chain and e-commerce domain with limited coding expertise can achieve their tech dreams through our program

Experienced Professionals at Leadership Roles

For managers and leaders seeking a rewarding career transition while maintaining their current roles can choose this data science domain elective.

Tools & Modules

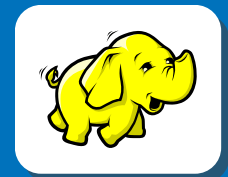| Python	SQL	Tableau	PowerBI
R	MongoDB	Tensorflow	Hadoop
Apache Spark	Azure	Git	GitHub

Transition Process

Transforming 35k+ careers with staggering 250% salary boosts and an exceptional 175% average hike.

Get IBM Course Completion Certificate

Complete the most sought-after program, get IBM's course certificate, and elevate your skills to new heights!

Flexible Learning with Hands-On Exposure

Get immersive experiences for unparalleled learning through practical engagement taught by industry experts

Unlock Limitless Career Opportunities

Conquer the tech domain and open the gateway to boundless career prospects with 250% salary hike

Master Key Skills to Excel

Learn essential skills and industry insights for a remarkable career transition that propels you to excellence.

Enrol in our Program

Supercharge your career by enrolling in our industry-relevant program, designed to shape your professional trajectory.

What Will You Learn?

This elective teaches students how to analyze data and derive key insights that can help businesses acquire a competitive advantage. The RSCA process, Sentiment Analysis, Google Analytics, NLP, Recommendation systems, Deep learning concepts, Text Analysis, and Customer Behavioral Analytics. The application of Operations Research in supply chain management is given its own module.

Models and metrics like as ROE, ROA, APT, INVT, and PPET are also defined in the Supply Chain Operation Reference (SCOR) framework. The use of simulation and time series forecasting in supply chain management will also be appreciated by the participants.

This E-Commerce , Retail and Supply Chain program is created with the goal of introducing participants to the principles, elements, business models, and other aspects of operating an electronic commerce business.

With domain expertise you will have a deeper understanding of the subject than anyone else in your company. Become well-versed and understand the best practices in your respective fields. Be aware of the issues you and your company may encounter in the future. Most crucially, a well-known Domain Specialist boosts company's market value.

🚀 **Project Life Cycle Expertise** with 2 Capstone Projects

Domain Training

Supply chain

Module 1

A deeper insight of predictive analytics in supply chain. This module will help you to implement a cost-effective supply chain model in your organisation.

The entire shipping and logistics will run on the basis of a future insight, which will be precise enough to fulfil the customer demands and to manage the product waste, simultaneously.

The module will cover the following topics:

- Predictive maintenance measures
- Cost and time effective delivery path tracking
- Product quality optimization according to demand, etc.

Module 2

- You will be taught how to utilize linear regression to improve the performance of paid advertisements.

- You'll also learn about the many terms utilized in today's customer analytics.

- You'll learn how to keep your consumers engaged with the highest level of pleasure. Get acquainted with simulation in the context of Supply Chain Management.

- Understanding Online Behavior and identifying Target Consumers.
- Introduction to Segmentation/Clustering
- Clustering Techniques and approaches
- Introduction to Recommender Systems
- Search-Based Methods
- Associate Rules

Domain Training

Module 3

Understand the role of Supply Chain Analytics in Digital Transformation, machine learning approaches to business choices.
Understand how NLP techniques, such as voice to text and text to voice models, can be used to address the context. Learn how to use Computer Vision to understand how machines (computers) perceive an image or video input. To construct AI apps for recording customers' purchasing behavior, process photos and videos using CNN.

- Network Analysis
- Designing a supply chain network
- Managing Affiliate Networks and Vendor
- Inventory and Logistics Management

Module 4

By the end of this module you'll be able to Utilize time series forecasting to take proactive business decisions .Use data visualisation concepts to represent data for easy understanding

- Text and Google Analytics
- Chatbots
- Neural Networks in Supply Chain
- Time Series Analysis

Domain Training

E-commerce

Introduction to E-Commerce

- You will learn the introductory topics of the E-commerce industry, basic concepts and relatable examples with case studies will be covered. You will learn about the applications and potential in the retail and supply chain arena at the end of this session.

  - E-Commerce Market and Customer
  - Emerging Trends Opportunities and Challenges
  - B2B , C2C , B2C Models
  - Technology and Internet factors
  - Website building and hosting
  - Market Research (Web based)

Module 1 — A deeper understanding of the Recommendation engine

This module will help you build an analytical system for e-commerce sites with better product recommendations. This module includes the conceptual and practical topics on :
  - Impersonalized recommendation engine
  - Personalized recommendation engine

Besides, you will get training on the practical application of:
  - Precision
  - NDCG
  - MAP for K
  - RMSE
  - Mean Reciprocal Rank
  - Types of data filtering
  - Choosing the right ML algorithm model based on scenarios.
  - Matrix factorization

Domain Training

Module 2

Advanced machine learning approach to demand forecasting

This module will enable you to provide the ultimate data-driven solutions to e-commerce companies with better pricing but with better cash-flow management strategies. Prime topic includes

- Revealing the hidden data patterns
- Robust system designing
- Data processing speed acceleration without hampering the preciseness.
- Automation of newer data updates.
- Data Validation and data security

Module 3

Deep learning approach to dynamic pricing and offers

This module helps you to learn the real-life application of deep learning algorithms. This module will include several analytical tools and artificial neural network designing with Keras. Other topics include

- Different web analytics tools
- Tricky strategic action on Big data
- Development of deep learning models addressing the competitive advantages.

Domain **Training**

Retail

Module 1

Application of analytics in Customer Journey analysis

This module will help you learn the strategies and key points of converting the zig-zag pattern of buyers journey into a straightforward way for precise buyers journey analysis.

At the end of this module, you will be able to carry out data-driven cross-platform analysis of customer buying as well as product and price based expectations.
The module will be more focused on the complex use of
- Emotion analytics
- Decision tree machine learning algorithm
- Logistic regression algorithm

Module 2

Automation of the inventory Management

This module will help you to understand the scopes of AI allocation in the field of inventory management. you will be able to interlink all your stores, shoppers, and manufacturers with ML and AI-powered applications and analytics software.
The entire course will provide focus on the data-driven approaches and application of computer vision on
- Pricing errors
- out-of-stock items

Domain Training

Designing of analytical applications for In-store assistance and human interference-free customer support

This module will help you to manage the long queues of customers in front of the physical store help desk.

The key focus will remain on the use of data analytics for making customer choices in a sell-paced manner.

With the help of Lowebot, digital AI-powered device customers can get insightful output against their queries.

This module will take you deeper in

- Artificial neural network
- Text and voice analytics.
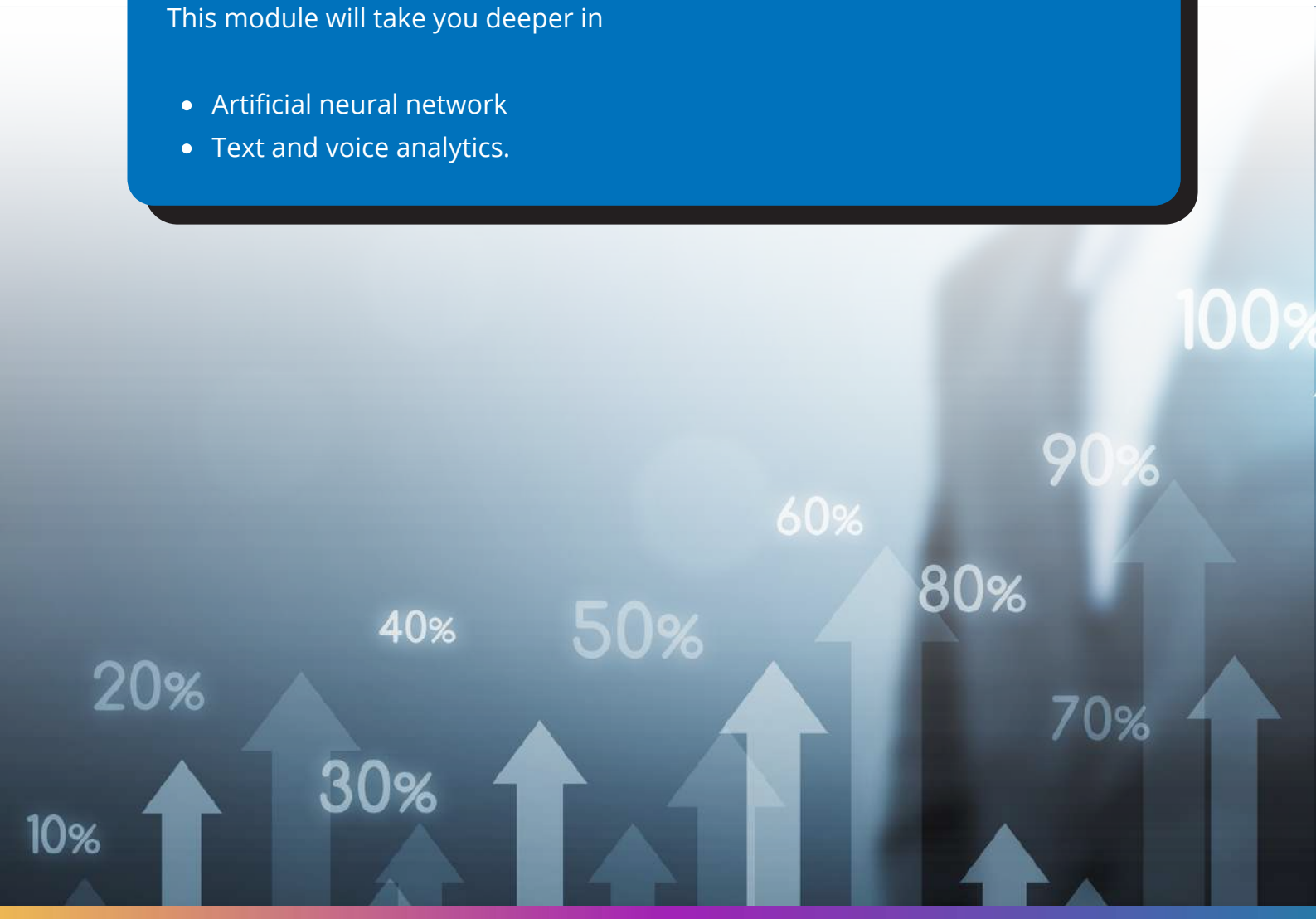
Domain Training

Use of big data analytics for identification of most profitable customer community and business locations

This module will introduce you to the application of big data technology in terms of customer-related data analysis.

This module will focus more on several BI tools for the analysis of customer data and demands through real-time graphical analysis.

Tools covered under this module will be

- Hadoop
- Power BI
- IBM Cognos
- Tableau
- Matplotlib
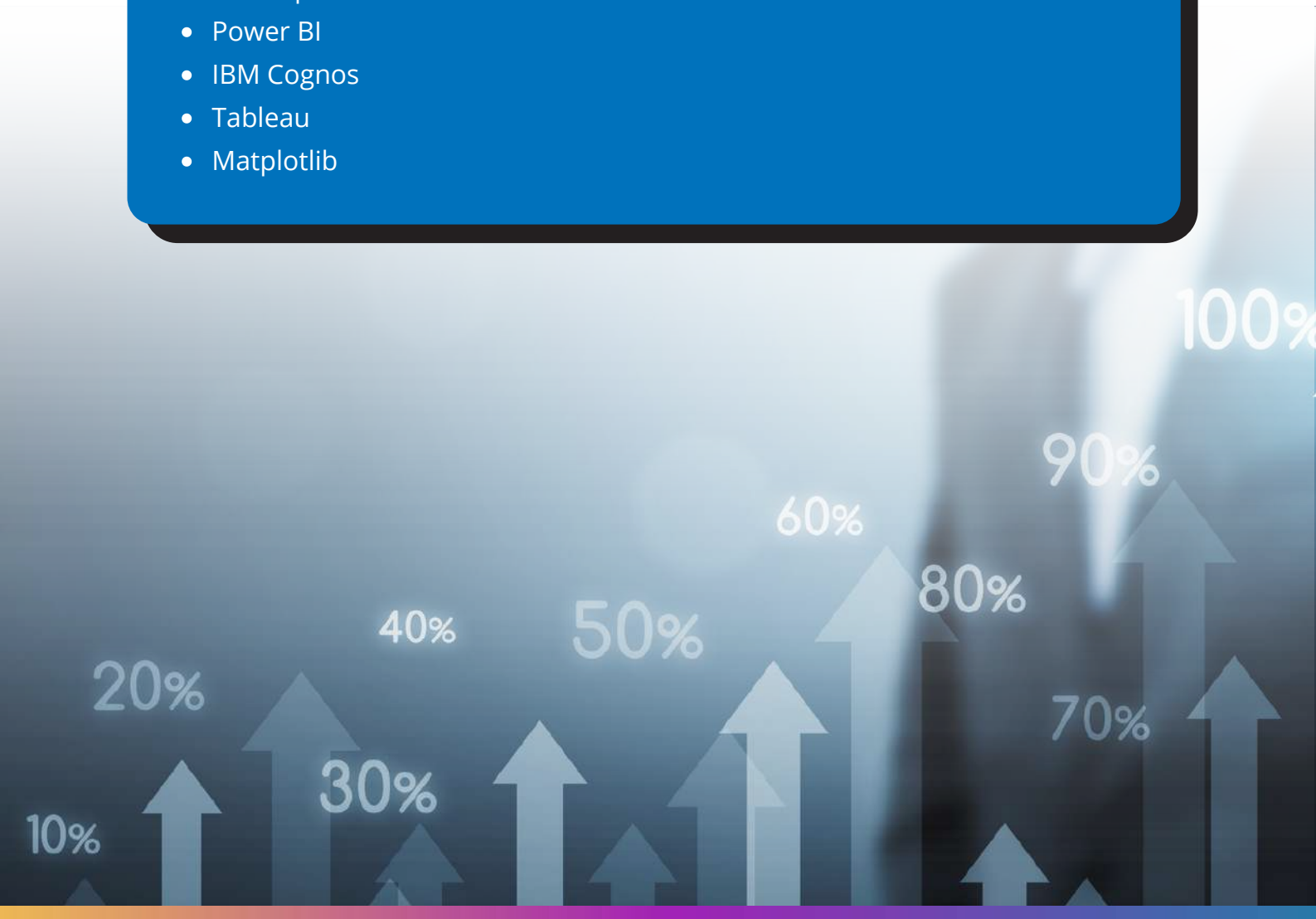
Domain Specalized Projects

Retail Domain

Usage-based warranty analytics

- Following the identification (forecasting) of the number of goods you need to purchase, determining the appropriate reorder level is vital to achieve that production does not halt due to stock-outs and that working capital is not blocked due to incorrect orders. Previously, procurement managers determined reorder levels based on their judgments at the product category level; however, it is now more convenient to calculate reorder levels for each item procured.

- Furthermore, using statistical techniques, one can determine the demand distribution curve for various products based on historical data, and orders can be placed accordingly.

E Commerce Domain

Fraud Detection

- Fraud in an e-commerce sector is one of the most difficult sectors, since it may produce enormous financial losses. Fraud may occur in the fields of commercial identities, advanced charges, wire transfer fraud, reimbursement fraud, etc.

- In the detection of fraud, deep neural networks prove successful. The system is based on data analysis techniques and a prediction based on neural networks to detect fraudulent tendencies that may help retailers defend themselves against fraudsters.

Domain Specalized Projects

Retail Domain

Customer Sentiment Analysis

- The most important element of sentiment analysis is data analysis on the body of the text in order to comprehend the viewpoint represented within, as well as other crucial variables such as modality and mood.

- Natural language processing, text analysis, and other techniques are used to analyze neutral or negative opinions for brand-customer engagement. Data is often collected for sentiment analysis from online reviews, social media, feedback forms, online polls, and other sources.

E Commerce Domain

Recommendation System

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Domain Specalized Projects

Supply Chain Domain

Algorithm for routing the transportation network

- Because of the recent increase in shipping costs due to a container shortfall, optimising the container loading has become a top concern. Transportation expenses are often greater than warehousing costs, thus focusing on it to identify improvement levers makes sense.

- A clear understanding of how you plan to move your goods using Data Visualization may result in substantial cost savings.

Supply Chain Domain

Identification of the Reorder Level

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Domain Specalized Projects

Retail Domain

Optimization of the price

- The optimization methods provide a major benefit in terms of having the appropriate pricing for both the consumer and the store. The process of determining a pricing is influenced not only by the expenses of producing an item, but also by the budget of a typical consumer and the offers of rivals.

- The tools for data analysis have elevated this problem to a new levels of relevance. Customers must be segmented in order for the algorithm to determine how they will react to pricing adjustments. As a result, the expenses that fulfil a company's objectives may be established. Retailers may use the concept of real-time optimization to attract consumers, keep their attention, and implement personalised pricing schemes.

Supply Chain Domain

Planning a network

- It is essential to maintain that the inventory facilities and production amenities are all adequately networked in order to have a strong supply chain and a lucrative company. Analytics accounts for the various production facilities and warehouses in the supply chain and how it may influence the demand.

- It assists in facilitating flow routes, making it possible to meet diverse client demand at the lowest total cost.

FAQs

? Can I select multiple domain electives?

You can select multiple electives based on your career goal and work experience/academics.

? What if I don't have any prior experience in any domain?

Even if you don't have any prior experience, you can still opt for any elective.

? Can I change my domain electives later ?

Yes, you can change your elective or repeat the training later within the Course Accessibility Duration.

? Are there any additional charges for electives?

No, there are no additional/ hidden charges.

STILL CONFUSED?

Apply for **FREE** Career Counselling Session with our Expert

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