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Facilitator Guide



Sector
Retail

Sub-Sector
Retail Operations; E-Commerce

Occupation
Store Operations; Sales Operations

Reference ID: RAS/MCr-0001
NSQF level: 4

Fundamentals of Artificial Intelligence (AI) for Retail

This book is sponsored by

Retailers Association's Skill Council of India

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> Skilling is building a better India. If we have to move India towards development then Skill Development should be our mission.

Shri Narendra Modi
Prime Minister of India

Acknowledgements

The Retailers Association's Skill Council of India (RASCI) would like to thank all the individuals and institutions who contributed in various ways towards the preparation of this facilitator guide. The facilitator guide could not have been completed without their active contribution. Special gratitude is extended to those who collaborated during the preparation of the different modules in the facilitator guide. Wholehearted appreciation is also extended to all who provided peer review for these modules.

The preparation of this guidebook would not have been possible without the retail industry's support. Industry feedback has been extremely beneficial since inception to conclusion and it is with their guidance that we have tried to bridge the existing skill gaps in the industry. This facilitator guide is dedicated to the aspiring youth, who desire to achieve special skills that will be a lifelong asset for their future endeavours.

About this Guide

The Facilitator Guide is designed for the Trainers to enable training for a specific job role and enhance the quality of executing the training program. This particular Facilitator Guide is designed for enabling the training program for the Micro Credential Course “Fundamentals of Artificial Intelligence (AI) for Retail” in the Retail Sector.

This course is aligned to Micro credential, Fundamentals of Artificial Intelligence (AI) for Retail, Reference ID: RAS/MCr-0001.

This Micro Credential is developed by Retail Sector Skills Council of India. This course encompasses all 08 modules.

Each unit starts with learning objectives, followed by relevant activities and corresponding training methodology. Upon successful completion of this course, the participant will be able to:

Module 1: Basics of Artificial Intelligence (AI)

Module 2: Applications of AI in Retail

Module 3: Customer Insights and Personalization

Module 4: Role of AI in Inventory and Supply Chain Management

Module 5: Pricing Strategies and AI

Module 6: Customer Service and Chatbots

Module 7: Ethical and Privacy Considerations

Module 8: Future Trends

Besides, it has been endeavored to follow the facilitator guide guidelines prescribed by the National Skill Development Corporation.

Symbols Used

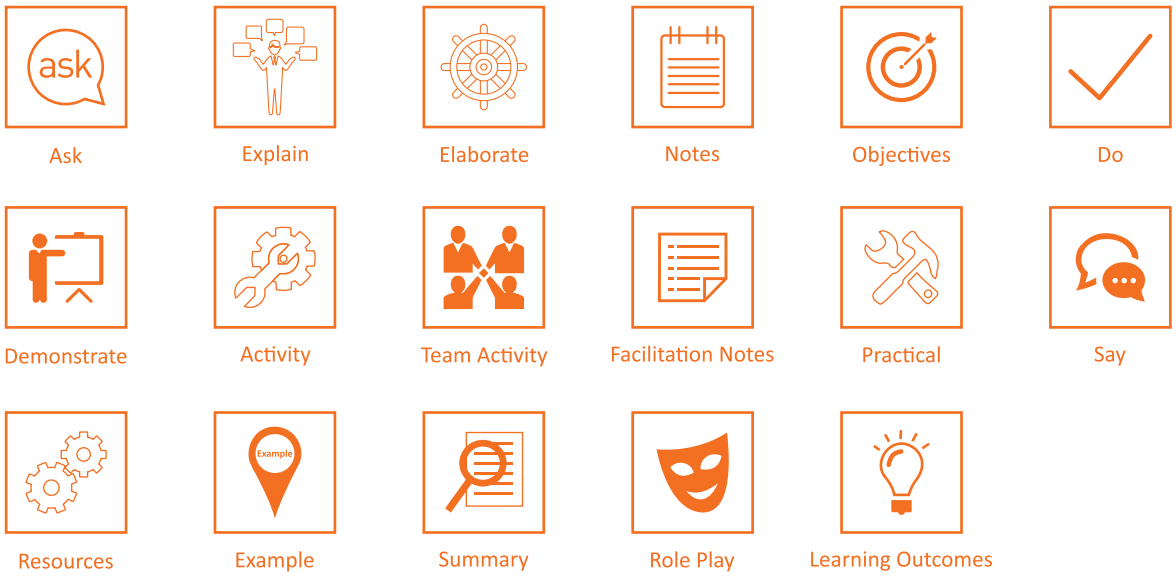

Table of Contents

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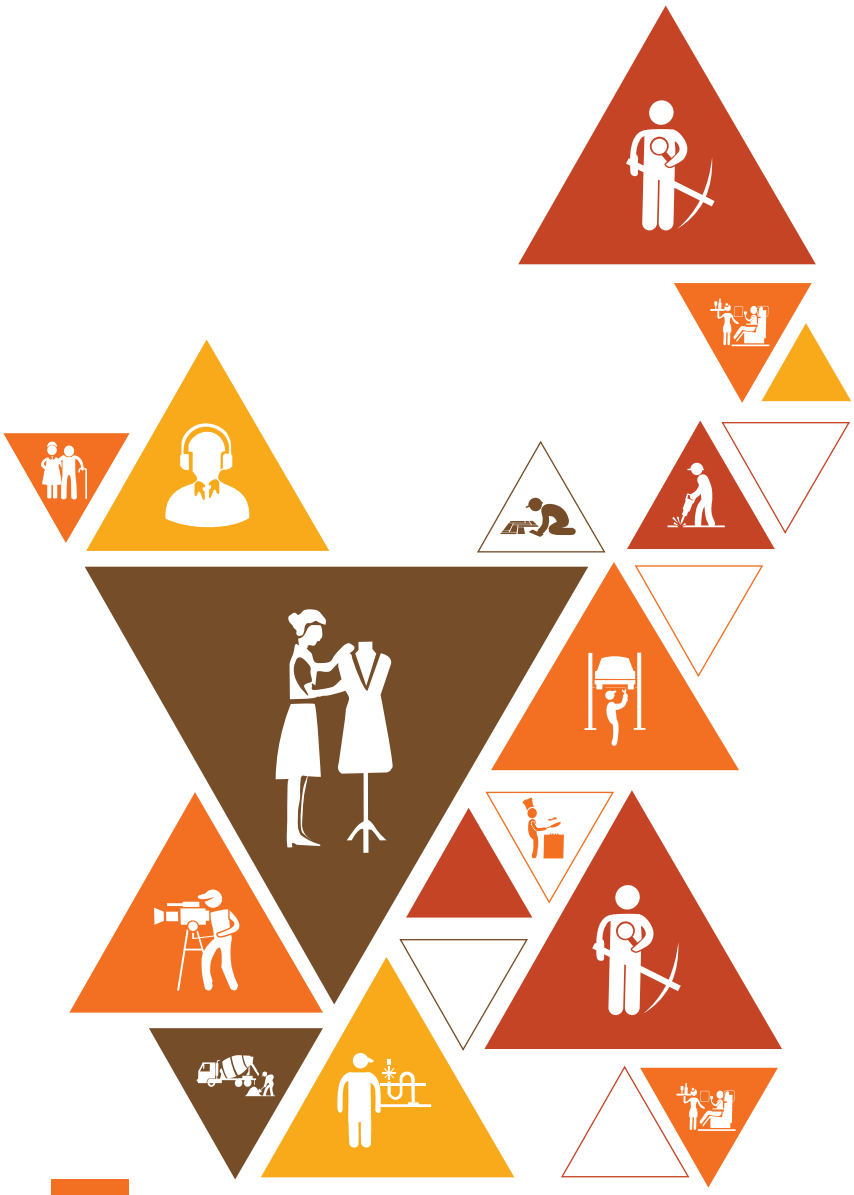

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1. Basics of AI

Unit 1.1 Concepts of Artificial Intelligence (AI)

Key Learning Outcomes

At the end of this module, the trainee will be able to:

1. Define artificial intelligence (AI) and its fundamental concepts
2. Explain the difference between narrow (or weak) AI and general (or strong) AI
3. Describe how machine learning is a subset of AI
4. Demonstrate the relationship between AI and machine learning through illustration and presentations

Unit 1.1 Concepts of Artificial Intelligence (AI)

Unit Objectives

At the end of this unit, the trainee will be able to:

1. Define artificial intelligence (AI) and its core concepts and fundamental principles
2. List various types of AI applications
3. Distinguish between Narrow AI and general AI
4. Discuss the relationship between AI and machine learning
5. Explain how machine learning functions as a crucial subset of AI

Resources to be Used

- Participant Handbook
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

Do

- Enter the class ten minutes before the session begins.
- Welcome and greet the participants.
- Take the daily attendance.
- Maintain the record of assessment scores.

Say

- Start the class by saying, “This training program is designed to help understand the fundamental concepts of Artificial Intelligence (AI) and explore its diverse applications in the retail industry. Through this course, we will learn how AI can personalize customer shopping experiences, streamline retail operations, and drive transformation across various aspects of retail.”
- Talk about the Micro Credential (MC), and the Modules in it.
- List the compulsory modules of the Micro credential (MC) “Fundamentals of Artificial Intelligence (AI) for Retail”.
- Say, “Before we start the program let’s play a small game”.

Group Activity

Objective	The purpose of this activity is to connect with the course mates.
Materials required	Book (for passing)
Steps/procedure	1. Welcome the new participants by giving their introduction 2. Make the participants stand in a circle, close enough to the person on each side of them so that they can pass the book quickly. 3. Say 'Stop' when it is least expected. At that time, the participant holding the book introduces himself/herself while saying his/her name and a little additional information such as favourite hobbies, where they stay, their favourite subject, etc. 4. The winner of the game should stand and introduce himself/herself at the end of the game. 5. At last, thank the participants for their participation.
Conclusion / What has been achieved	This activity helps the participants to know each other and allows them to feel comfortable.

Explain

- Explain the following topics:
  - Artificial Intelligence (AI), its Core Concepts and Fundamental Principles
    - Core Concepts of AI - Refer to PH Fig.1.2
    - Fundamental Principles of AI in Retail Operations - Refer to PH Table 1.1
  - Types of AI Applications - Refer to PH Table 1.2
  - Difference Between Narrow AI and General AI - Refer to PH Table 1.3

Ask

- What is meant by AI?
- How does AI help improve the customer experience in retail?
- List some applications of AI.
- What is the primary difference between Narrow AI and General AI?

Say

- "Let us proceed with an activity to understand the applications of AI in various industries."

Group Activity

Objective	This activity aims to help participants understand how AI is applied across various industries, highlighting its diverse applications and impact.
Materials required	• Presentation slides or charts showcasing AI applications in different industries (e.g., healthcare, finance, retail, manufacturing, etc.) • Handouts with brief descriptions of AI use cases in various industries • Pens or markers • Whiteboard or flip chart (optional)
Steps/procedure	1. Begin by introducing the topic of AI applications, explaining how AI is revolutionizing various industries by improving efficiency, enhancing decision-making, and delivering personalized experiences. 2. Briefly describe AI applications in industries such as Retail, Healthcare, Finance, Manufacturing, etc. 3. Provide handouts summarizing key AI applications in these industries, along with real-world examples for each. 4. Divide participants into small groups and assign each group a specific industry. 5. Ask groups to discuss the key applications of AI in their assigned industry. 6. Encourage them to identify one real-world example of AI implementation in their industry and analyze why it is effective. 7. Instruct groups to explore the benefits, challenges, and future potential of AI in their assigned industry. 8. Have each group present their findings to the class.
Conclusion / What has been achieved	This activity enables participants to understand the diverse applications of AI across various industries.

Tips

- Monitor student progress during the activity and provide support as needed.
- Evaluate student understanding through class participation, completion of handouts, and verbal responses during review and application.

Elaborate

- Elaborate the following topics:
  - Relationship Between AI and Machine Learning - Refer to PH Fig.1.3
  - Functioning of Machine Learning as a Crucial Subset of AI
  - Significance of Moral AI for Retail Operations - Refer to PH Table 1.4

Ask

- What is meant by Machine Learning?
- Why is it important to ensure the ethical use of AI in retail?

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Summary

- Summarize the session.
- Prepare a list of participants' doubts if they have any. Encourage them to ask questions.
- Answer their queries.

Exercise

1. Instruct the trainees to open their Participant Handbook and complete the exercise given in Module 1.
2. Ensure that the participants have opened the correct page for the activity.
3. Give them 20 minutes to complete the exercise.
4. Exercise Hints:

- **Multiple-choice Questions:**
    1. Training models with labeled data
    2. Computer Vision
- **Answer the following questions:**
    1. **List the core concepts of AI.**
       Hint: Refer to 1.1.1 in the participant handbook
    2. **What is the difference between Narrow AI and General AI?**
       Hint: Refer to 1.1.3 in the participant handbook
    3. **Explain the relationship between AI and Machine Learning.**
       Hint: Refer to 1.1.4 in the participant handbook

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Concepts of Artificial Intelligence (AI)

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2. Applications of AI in Retail

Unit 2.1 Role of AI and Data Analytics in Retail

Key Learning Outcomes

At the end of this module, the trainee will be able to:

1. Articulate the applications and uses of AI in organised retail
2. Describe the concept of data mining and how it can uncover insights from retail data
3. Show practical applications of AI in data mining in retail to demonstrate understanding through research and presentation

Unit 2.1 Role of AI and Data Analytics in Retail

Unit Objectives

At the end of this unit, the trainee will be able to:

1. Outline the role of AI in the retail sector
2. Discuss the role of AI in recommendation systems for product suggestions in the retail industry
3. Discuss various ways artificial intelligence (AI) is being used in the retail industry, with a focus on demand forecasting, inventory control, pricing optimization, and customer service
4. Explain the role of data in AI applications within the retail sector
5. Explain the concept of data mining, and its ability and the techniques to uncover meaningful insights of retail data

Resources to be Used

- Participant Handbook
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

Do

- Enter the class ten minutes before the session begins.
- Welcome and greet the participants.
- Take the daily attendance.
- Maintain the record of assessment scores.

Say

- Start the class by saying, “This unit will help you to understand the role of AI and Data analytics in retail.”

Explain

- Explain the following topics:
  - Role of AI in Retail Sector – Refer to PH Fig.2.1
  - Role of AI in Recommendation Systems for Product Suggestions in Retail Industry - Refer to PH Table 2.1

Ask

- Can you give a real-world example of how AI is used in retail?
- Can you name an e-commerce platform that uses AI?

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Say

- "Let us proceed with an activity to understand the role of AI in the retail industry."

Activity

Objective	This activity aims to help participants understand how AI transforms the retail sector by improving operations, enhancing customer experiences, and optimizing decision-making.
Materials required	• Presentation slides or charts showcasing AI applications in retail (e.g., chatbots, recommendation engines, dynamic pricing, inventory management) • Handouts with brief descriptions of AI-powered retail solutions • Pens or markers • Whiteboard or flip chart (optional)
Steps/procedure	1. Introduce AI's role in the retail sector, emphasizing its impact on customer experience, inventory management, and operational efficiency. 2. Highlight key AI-driven solutions such as personalized recommendations, automated checkout, demand forecasting, and fraud detection. 3. Provide brief explanations of AI applications in retail. 4. Provide handouts summarizing AI's key roles in retail, along with real-world examples from companies like Amazon, Walmart, or Reliance Retail. 5. Divide participants into small groups and assign each group a specific AI application in retail. 6. Ask them to discuss how AI is used in their assigned area, its benefits, and potential challenges. 7. Encourage them to find a real-world example of AI implementation in retail and analyze why it is successful. 8. Instruct groups to explore the impact of AI in retail, considering aspects like efficiency, cost reduction, and customer experience. 9. Have each group present their findings to the class.
Conclusion / What has been achieved	This activity enables participants to understand the significant role AI plays in the retail sector.

Tips

- Monitor student progress during the activity and provide support as needed.
- Evaluate student understanding through class participation, completion of handouts, and verbal responses during review and application.

Elaborate

- Elaborate on the following topics:
  - Ways of Using Artificial Intelligence (AI) in Retail Industry - Refer to PH Table 2.2
  - Challenges of Integrating AI with Legacy Retail Systems
  - Case Studies Demonstrating Quantifiable Results of AI in Retail - Refer to PH Table 2.3
  - Role of Data in AI Applications Within Retail Sector
  - Concept of Data Mining, its Ability, and Techniques to Uncover Meaningful Insights into Retail Data

Ask

- How can AI improve customer experience in retail stores?
- What are some common challenges retailers face when adopting AI in existing systems?
- Why is data important for AI-powered retail solutions?
- What is data mining?

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Summary

- Summarize the session.
- Prepare a list of participant's doubts if they have any. Encourage them to ask questions.
- Answer their queries.

Exercise

1. Instruct the trainees to open their Participant Handbook and complete the exercise given in Module 2.
2. Ensure that the participants have opened the correct page for the activity.
3. Give them 20 minutes to complete the exercise.
4. Exercise Hints:

- **Multiple-choice Questions:**
  1. Analyzing large datasets to discover patterns and insights for decision-making
  2. By analyzing historical sales data, trends, and external factors to predict future demand
- **Answer the following questions:**
  1. **Explain the role of AI in the retail sector.**
     Hint: Refer to 2.1.1 in the participant handbook
  2. **What is data mining?**
     Hint: Refer to 2.1.5 in the participant handbook
  3. **Explain the role of data in AI applications.**
     Hint: Refer to 2.1.4 in the participant handbook

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Role of AI and Data Analytics in Retail

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3. Customer Insights and Personalization

Unit 3.1 Customer Segmentation for Enhanced Retail Experience

Key Learning Outcomes

At the end of this module, the trainee will be able to:

1. Explain how AI is used to analyse customer data and create personalized shopping experiences
2. Discuss the concept of customer segmentation and how it can be enhanced with AI
3. Research and analyze a retail case study where AI-driven customer segmentation has been implemented

Unit 3.1 Customer Segmentation for Enhanced Retail Experience

Unit Objectives

At the end of this unit, the trainee will be able to:

1. Explain the concept of customer segmentation and its significance in organised retail
2. Explain the principles and elements of artificial intelligence (AI) that aid in analyzing customer data to create personalized shopping experience
3. Discuss the impact of AI-driven customer data analysis and segmentation on the overall shopping experience, considering factors such as customer satisfaction and loyalty

Resources to be Used

- Participant Handbook
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

Do

- Enter the class ten minutes before the session begins.
- Welcome and greet the participants.
- Take the daily attendance.
- Maintain the record of assessment scores.

Say

- Start the class by saying, “This unit will help you to understand customer segmentation and how AI enables retailers to categorize customers effectively for a personalized and improved shopping experience.”

Explain

- Explain the following topics:
  - Concept of Customer Segmentation and its Significance in Organised Retail – Refer to PH Fig.3.2
  - Principles and Elements of AI for Personalized Shopping Experiences
  - Impact of AI-driven Customer Data Analysis and Segmentation on Shopping Experience – Refer to PH Table 3.1

Ask

- Why is customer segmentation important for retail businesses?
- How does AI help in creating personalized shopping experiences for customers?
- How does AI-driven customer data analysis improve the shopping experience?

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Say

- "Let's move on to an activity where we will explore how AI-powered segmentation can be used to solve common challenges in retail."

Activity

Objective	This activity aims to encourage participants to think creatively about how AI-powered segmentation can address common retail challenges such as declining customer engagement and inventory overstock.
Materials required	• Presentation slides or charts explaining AI-driven customer and inventory segmentation • Handouts outlining common retail challenges related to customer engagement and inventory management • Whiteboard or flip chart • Pens or markers

Steps/procedure	1. Briefly explain AI-driven segmentation in retail and how it helps categorize customers and inventory based on various factors like purchase behavior, preferences, demand forecasting, and seasonal trends. 2. Highlight real-world applications, such as AI-powered customer segmentation for personalized marketing or AI-driven demand forecasting to optimize stock levels. 3. Pose a challenge to the class, such as: ○ A retail store notices a drop in repeat customers and engagement with promotions. ○ A retailer struggles with excess stock of certain products, leading to high storage costs and markdowns. 4. Divide participants into small groups. 5. Assign each group one challenge (or let them choose). 6. Ask groups to brainstorm and discuss how AI-powered segmentation can help solve the issue. 7. Each group presents its solution to the class. 8. Encourage discussion on which ideas seem most practical and why.
Conclusion / What has been achieved	This activity enables participants to develop innovative, AI-driven segmentation strategies for solving retail challenges.

Tips

- Monitor student progress during the activity and provide support as needed.
- Evaluate student understanding through class participation, completion of handouts, and verbal responses during review and application.

Summary

- Summarize the session.
- Prepare a list of participant's doubts if they have any. Encourage them to ask questions.
- Answer their queries.

Exercise

1. Instruct the trainees to open their Participant Handbook and complete the exercise given in Module 3.
2. Ensure that the participants have opened the correct page for the activity.
3. Give them 20 minutes to complete the exercise.
4. Exercise Hints:

- **Multiple-choice Questions:**
  1. Psychographic Segmentation
  2. Analyzing purchasing habits, brand loyalty, and frequency of purchases
- **Answer the following questions:**
  1. **Explain the importance of customer segmentation in retail.**
     Hint: Refer to 3.1.1 in the participant handbook
  2. **Explain the impact of AI-driven customer data analysis and segmentation on shopping experience.**
     Hint: Refer to 3.1.3 in the participant handbook

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Customer Segmentation for Enhanced Retail Experience

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4. Role of AI in Inventory and Supply Chain Management

Unit 4.1 AI Applications in Supply Chain and Inventory Management

Key Learning Outcomes

At the end of this module, the trainee will be able to:

1. Explain how AI helps in optimizing inventory management and supply chain operations
2. Explain how AI can be used to enhance productivity in logistics and delivery processes
3. Research and analyze a case study of a retail company that utilizes AI for inventory management and supply chain optimization

Unit 4.1 AI Applications in Supply Chain and Inventory Management

Unit Objectives

At the end of this unit, the trainee will be able to:

1. Explain the aspect of AI that contributes towards optimizing inventory management and supply chain operations
2. Discuss the impact of AI on efficiency, cost-effectiveness, and overall supply chain performance
3. Discuss the role of predictive analytics in the context of stock management
4. Discuss the impact of AI-driven inventory optimization and predictive analytics on stock efficiency, considering factors such as cost reduction, improved order fulfillment, and enhanced customer satisfaction
5. Describe the role of AI in improving Logistics and delivery processes in retail
6. Describe the ways through which supply chain improvement is achieved through applications of AI Technologies
7. Discuss the use of AI in route optimization and demand forecasting
8. Describe the several ways through which the AI address challenges such as inventory management, order fulfillment, and delivery scheduling

Resources to be Used

- Participant Handbook
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

Do

- Enter the class ten minutes before the session begins.
- Welcome and greet the participants.
- Take the daily attendance.
- Maintain the record of assessment scores.

Say

- Start the class by saying, “This unit will help you to understand how AI enhances supply chain and inventory management by improving forecasting, optimizing stock levels, and increasing operational efficiency.”

Explain

- Explain the following topics:
  - AI in Inventory Management and Supply Chain Optimization – Refer to PH Table 4.1
  - Impact of AI on Efficiency, Cost-effectiveness, and Supply Chain Performance
  - Role of Predictive Analytics in Stock Management
  - Impact of AI-driven Inventory Optimisation and Predictive Analytics on Stock Efficiency – Refer to PH Fig.4.2

Ask

- How does AI help retailers manage inventory more efficiently?
- In what ways does AI reduce costs and improve supply chain performance?
- How can predictive analytics help retailers avoid stock shortages or overstocking?
- How does AI-driven inventory optimization improve stock availability?

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Elaborate

- Elaborate the following topics:
  - Role of AI in Improving Logistics and Delivery Processes in Retail – Refer to PH Table 4.2
  - Application of AI Technologies to Improve Supply Chain
  - Use of AI in Route Optimisation and Demand Forecasting
  - Application of AI to Meet Challenges in Inventory Management, Order Fulfilment and Delivery Scheduling
    - Inventory Management Challenges – Refer to PH Table 4.3
    - Order Fulfilment Challenges – Refer to PH Table 4.4
    - Delivery Scheduling Challenges – Refer to PH Table 4.5

Ask

- How does AI help in making retail logistics and delivery more efficient?
- What AI technologies are commonly used to enhance supply chain management?
- How can AI improve route planning and predict demand in retail?
- What are some common challenges retailers face in managing inventory?
- What factors can cause delays in order fulfillment?
- How can poor delivery scheduling impact customer satisfaction?

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Say

- "Let's move on to an activity where we will explore how AI is transforming logistics and delivery processes in the retail sector."

Activity

Objective	This activity aims to encourage participants to understand how AI is transforming logistics and delivery processes in the retail sector by improving efficiency, reducing costs, and enhancing customer satisfaction.
Materials required	• Presentation slides or charts illustrating AI applications in logistics and delivery (e.g., route optimization, predictive delivery times, warehouse automation) • Handouts with brief descriptions of AI-powered logistics and delivery solutions • Whiteboard or flip chart • Pens or markers

Steps/procedure	1. Explain the critical role of logistics and delivery in retail operations. 2. Introduce AI-driven solutions that improve logistics such as Route Optimization, Predictive Delivery Times, Warehouse Automation, Demand Forecasting, etc. 3. Present a scenario where a retailer is facing logistics and delivery challenges, such as: ○ Late Deliveries: Customers are receiving deliveries later than expected, leading to dissatisfaction. ○ High Delivery Costs: The retailer's delivery costs are high due to inefficient routing and underutilized vehicles. ○ Stockouts or Overstocking: Unpredictable demand leads to either stockouts or excess inventory, complicating delivery processes. 4. Divide participants into small groups. 5. Assign each group one challenge. 6. Ask each group to brainstorm AI-driven solutions to improve logistics and delivery. 7. Each group presents its solution to the class. 8. Encourage questions and discussions about the feasibility of each solution and how they might apply in real-world retail settings.
Conclusion / What has been achieved	This activity enables participants gain an understanding of how AI enhances logistics and delivery processes in retail.

Tips

- Monitor student progress during the activity and provide support as needed.
- Evaluate student understanding through class participation, completion of handouts, and verbal responses during review and application.

Summary

- Summarize the session.
- Prepare a list of participant's doubts if they have any. Encourage them to ask questions.
- Answer their queries.

Exercise

1. Instruct the trainees to open their Participant Handbook and complete the exercise given in Module 4.
2. Ensure that the participants have opened the correct page for the activity.
3. Give them 20 minutes to complete the exercise.
4. Exercise Hints:

- **Multiple-choice Questions:**
  1. By analyzing historical sales data, market trends, and external factors like weather and festivals
  2. It monitors real-time stock levels and determines reorder points to minimize carrying costs
- **Answer the following questions:**
  1. **Explain the role of predictive analytics in stock management.**
     Hint: Refer to 4.1.3 in the participant handbook
  2. **Explain the use of AI in Route Optimisation and Demand Forecasting.**
     Hint: Refer to 4.1.7 in the participant handbook

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AI Applications in Supply Chain and Inventory Management

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5. Pricing Strategies and AI

Unit 5.1 AI-Driven Pricing Strategies

Key Learning Outcomes

At the end of this module, the trainee will be able to:

1. Describe how AI can be used to set dynamic and competitive pricing strategies
2. Explain the concept of price elasticity
3. Discuss how AI can optimize pricing based on demand

Unit 5.1 AI-Driven Pricing Strategies

Unit Objectives

At the end of this unit, the trainee will be able to:

1. Discuss the concept of dynamic pricing and the use of artificial intelligence (AI) in setting pricing strategies
2. Explaining the use of AI technologies that contribute towards setting competitive pricing strategies
3. Define the concept of price elasticity
4. Explain the concept of price elasticity in the context of pricing strategies
5. Describe various AI techniques used to optimize pricing based on demand fluctuations
6. Discuss the impact of AI-driven pricing strategies on efficiency, revenue, and customer satisfaction, considering factors such as responsiveness to market changes and competitiveness

Resources to be Used

- Participant Handbook
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

Do

- Enter the class ten minutes before the session begins.
- Welcome and greet the participants.
- Take the daily attendance.
- Maintain the record of assessment scores.

Say

- Start the class by saying, “This unit will help you to understand how AI-driven pricing strategies optimize pricing decisions, enhance competitiveness, and maximize profitability in retail.”

Explain

- Explain the following topics:
  - Concept of Dynamic Pricing
  - Application of Artificial Intelligence (AI) in Setting Pricing Strategies
  - Application of AI Technologies to Set Competitive Pricing Strategies

Ask

- How does dynamic pricing help retailers adjust prices in real time?
- How can AI analyze market trends to set optimal pricing?
- How does AI help retailers stay competitive with pricing strategies?

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Say

- "Let's move on to an activity where we will explore how AI can be leveraged to set and optimize pricing strategies in the retail sector."

Activity

Objective	This activity aims to encourage participants to understand how AI can be leveraged to set and optimize pricing strategies in the retail sector, ensuring competitive advantage, profitability, and customer satisfaction.
Materials required	• Presentation slides or charts explaining AI-based pricing models (e.g., dynamic pricing, demand forecasting, competitor pricing analysis) • Handouts with examples of AI applications in pricing strategies • Whiteboard or flip chart • Pens or markers

Steps/procedure	1. Begin by explaining the importance of pricing strategies in retail and how AI can play a significant role in setting these strategies. 2. Discuss various AI-powered pricing techniques, such as Dynamic Pricing, Price Optimization, Competitor Pricing Analysis, etc. 3. Present a challenge, such as: ○ Unpredictable Sales: A retailer has trouble predicting demand for seasonal products, leading to overstock or stockouts. ○ Price Wars: The retailer's products are priced too high compared to competitors, causing a decline in sales. ○ Price Sensitivity: Customers are highly sensitive to small price changes, and the retailer needs to optimize prices without alienating customers. 4. Divide participants into small groups. 5. Assign each group a specific pricing challenge. 6. Ask groups to brainstorm how AI can be used to address their challenge. 7. Have each group present their proposed AI-driven pricing strategy to the class. 8. Encourage class discussion about how these AI strategies can be implemented in real-world retail scenarios, highlighting benefits, challenges, and feasibility.
Conclusion / What has been achieved	This activity enables participants gain an understanding of how AI can be applied to set competitive and profitable pricing strategies in retail.

Tips

- Monitor student progress during the activity and provide support as needed.
- Evaluate student understanding through class participation, completion of handouts, and verbal responses during review and application.

Elaborate

- Elaborate the following topics:
  - Concept of Price Elasticity and its Role in Pricing Strategies – Refer to PH Fig.5.1
  - Various AI Techniques to Optimize Pricing Based on Demand Fluctuations – Refer to PH Fig.5.2
  - Impact of AI-driven Pricing Strategies

Ask

- What are the types of price elasticity?
- How can AI adjust prices based on changes in customer demand?
- How do AI-driven pricing strategies benefit both retailers and customers?

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Summary

- Summarize the session.
- Prepare a list of participant's doubts if they have any. Encourage them to ask questions.
- Answer their queries.

Exercise

1. Instruct the trainees to open their Participant Handbook and complete the exercise given in Module 5.
2. Ensure that the participants have opened the correct page for the activity.
3. Give them 20 minutes to complete the exercise.
4. Exercise Hints:

- **Multiple-choice Questions:**
  1. How sensitive the quantity demanded of a product is to a change in its price
  2. Elastic Demand
- **Answer the following questions:**
  1. **What is meant by dynamic pricing?**
     Hint: Refer to 5.1.1 in the participant handbook
  2. **List types of price elasticity.**
     Hint: Refer to 5.1.4 in the participant handbook

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6. Customer Service and Chatbots

Unit 6.1 AI in Customer Service

Key Learning Outcomes

At the end of this module, the trainee will be able to:

1. Discuss the role of AI-powered chatbots and virtual assistants in providing customer support
2. Explain the benefits of chatbots in handling customer inquiries and resolving issues
3. Evaluate an AI-powered chatbot implemented in a retail customer support setting

Unit 6.1 AI in Customer Service

Unit Objectives

At the end of this unit, the trainee will be able to:

1. Describe the role of artificial intelligence (AI) in customer support, specifically focusing on the contributions of AI-powered chatbots and virtual assistants in enhancing customer interactions and support services
2. Explain the functionalities and capabilities of AI-powered chatbots and virtual assistants
3. Discuss the benefits and limitations of using AI in addressing customer concerns
4. Discuss the impact of AI-powered chatbots and virtual assistants on customer support services, considering factors such as response time, accuracy, and customer feedback

Resources to be Used

- Participant Handbook
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

Do

- Enter the class ten minutes before the session begins.
- Welcome and greet the participants.
- Take the daily attendance.
- Maintain the record of assessment scores.

Say

- Start the class by saying, “This unit will help you to understand how AI enhances customer service through chatbots, virtual assistants, and personalized support to improve customer satisfaction.”

Explain

- Explain the following topics:
  - Role of Artificial Intelligence (AI) in Customer Support
  - Functionalities and Capabilities of AI-powered Chatbots and Virtual Assistants

Ask

- How does AI improve customer support in retail?
- What are some key functions of AI-powered chatbots in retail?

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Elaborate

- Elaborate the following topics:
  - Benefits and Limitations of Using AI in Addressing Customer Concerns – Refer to PH Fig.6.3
  - Impact of AI-powered Chatbots and Virtual Assistants on Customer Support Services
  - Upcoming Developments in AI Customer Service

Ask

- What are some advantages and drawbacks of using AI for customer support?
- How do AI-powered chatbots enhance customer service in retail?
- Have you ever interacted with a chatbot for customer service?
- What are some future trends in AI that could improve customer service in retail?

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Say

- "Let's dive into a roleplay activity where we will compare human customer service agents with chatbots. In this scenario, one of you will play the role of a customer seeking assistance, while the other will be either a human agent or a chatbot."

Activity

Objective	This activity aims to compare the effectiveness of chatbots and human customer service agents in resolving customer issues, helping participants understand the strengths and limitations of chatbots in real-world customer service scenarios.
Materials required	• Scenario cards with common customer service issues (e.g., order tracking, return request, product inquiry) • Chatbot script template (optional, to guide participants playing the chatbot role) • Whiteboard or flip chart • Pens or markers

Steps/procedure	1. Begin by explaining the importance of customer service in the retail industry and how AI-powered chatbots are being used to handle common customer queries.
	2. Discuss the key differences between human customer service agents and chatbots, highlighting the advantages and limitations of both.
	3. Present a customer service scenario to the class, such as:
	  ○ A customer wants to track their online order that has not yet been delivered.
	  ○ A customer is unhappy with a product and wants to initiate a return or exchange.
	  ○ A customer has a query about a product's features or availability.
	4. Divide participants into pairs or small groups, with each pair/group taking on one of the following roles:
	  ○ Chatbot Role: One participant will play the role of the chatbot, responding to the customer using a scripted approach (either based on a pre-prepared template or improvising based on knowledge of chatbot features).
	  ○ Human Customer Service Agent Role: Another participant will play the role of a human customer service agent, responding with empathy and personalized solutions.
	  ○ Customer Role: The remaining participants will play the role of the customer and present their issue to both the chatbot and human agent.
	5. Begin the roleplay, where the customer approaches both the chatbot and the human customer service agent with the same issue.
	6. Each "customer" should interact with the chatbot first and then the human agent, simulating a real-world scenario.

Steps/procedure	7. After the roleplay, gather the participants for a group discussion. Ask them to reflect on the following: ○ How did the chatbot handle the issue compared to the human agent? ○ Were there any challenges in using the chatbot (e.g., misunderstood queries, slow responses)? ○ How did the human agent address the customer's concern differently (e.g., more personalized, empathetic response)? ○ In what situations would a chatbot be more effective than a human agent, and vice versa? 8. Conclude the activity by summarizing the key differences between chatbots and human agents in customer service, emphasizing that while chatbots can be effective in handling simple, repetitive tasks, human agents still play a critical role in providing personalized service and solving more complex problems.
Conclusion / What has been achieved	This activity enables participants gain a clear understanding of the strengths and limitations of both chatbots and human customer service agents.

Tips

- Monitor student progress during the activity and provide support as needed.
- Evaluate student understanding through class participation, completion of handouts, and verbal responses during review and application.

Summary

- Summarize the session.
- Prepare a list of participant's doubts if they have any. Encourage them to ask questions.
- Answer their queries.

Exercise

1. Instruct the trainees to open their Participant Handbook and complete the exercise given in Module 6.
2. Ensure that the participants have opened the correct page for the activity.
3. Give them 20 minutes to complete the exercise.
4. Exercise Hints:

   Multiple-choice Questions:

   1. Providing automated responses to common queries
   2. Virtual assistants can handle broader functions, including scheduling and complex customer service tasks

   Answer the following questions:

   1. **Explain the use of AI Chatbots and Virtual Assistants in providing customer support.**
      Hint: Refer to 6.1.2 in the participant handbook
   2. **List the benefits and limitations of using AI in addressing customer concerns.**
      Hint: Refer to 6.1.3 in the participant handbook

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7. Ethical and Privacy Considerations

Unit 7.1 Ethical Implications of AI Integration in Retail

Key Learning Outcomes

At the end of this module, the trainee will be able to:

1. Discuss the ethical concerns related to AI in retail, such as data privacy and bias in algorithms
2. Explain the importance of transparency and fairness in AI applications

Unit 7.1 Ethical Implications of AI Integration in Retail

Unit Objectives

At the end of this unit, the trainee will be able to:

1. Discuss the ethical concerns associated with the integration of AI in the retail sector
2. Explain the ethical principles to address concerns related to AI in retail
3. Explain the importance of data privacy in AI applications
4. Explain the importance of transparency in AI applications, emphasizing the need for clear communication and fairness in AI applications
5. Discuss the ethical impact of AI applications in retail, considering factors such as fairness, transparency, and the protection of user rights

Resources to be Used

- Participant Handbook
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

Do

- Enter the class ten minutes before the session begins.
- Welcome and greet the participants.
- Take the daily attendance.
- Maintain the record of assessment scores.

Say

- Start the class by saying, “This unit will help you to understand the ethical implications of AI integration in retail, focusing on privacy, transparency, and responsible data usage.”

Explain

- Explain the following topics:
  - Ethical Concerns Associated with Integration of AI in Retail Sector – Refer to PH Table 7.1
  - Ethical Principles to Address Concerns Related to AI in Retail
  - Importance of Data Privacy in AI Applications – Refer to PH Table 7.2

Ask

- What ethical concerns do you think arise from using AI in retail?
- What are some ethical principles that should guide AI usage in retail?
- Why is data privacy important when using AI in retail?

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Say

- "Let's move on to an activity where we will explore the importance of data privacy in AI applications."

Activity

Objective	This activity aims to encourage participants to understand the importance of data privacy in AI applications, particularly in retail, and explore how retailers can protect customer data while leveraging AI for personalization and operational efficiency.
Materials required	• Presentation slides or charts explaining the role of data privacy in AI applications, especially in the context of retail • Handouts with key points on data privacy laws (e.g., GDPR, CCPA) and best practices for securing customer data • Case study examples of data privacy breaches in retail AI applications • Whiteboard or flip chart • Pens or markers

Steps/procedure	1. Begin by explaining the importance of pricing strategies in retail and how AI can play a significant role in setting these strategies. 2. Start by discussing the increasing role of AI in retail, such as personalized recommendations, customer behavior tracking, and predictive analytics. 3. Explain how AI relies on vast amounts of customer data to function effectively, and emphasize the importance of safeguarding this data to build trust and comply with privacy laws. 4. Introduce the concept of data privacy and its implications for AI in retail, mentioning privacy laws like GDPR (General Data Protection Regulation). 5. Present a real-world case study where a company faced a data privacy breach due to improper handling of customer data used in AI applications. 6. Divide participants into small groups and assign each group the task of brainstorming strategies to prevent data privacy issues in AI applications. Encourage them to think about the following: ○ Data Collection Practices: How can retailers collect customer data responsibly? ○ AI Algorithms and Data Use: How can AI systems ensure that personal data is only used for its intended purpose, with customer consent? ○ Security Measures: What security protocols should be in place to protect customer data from breaches? ○ Transparency and Communication: How can companies keep customers informed about data collection and usage, building trust in AI applications? 7. Have each group present their privacy protection strategies. 8. Encourage the class to discuss the feasibility of these strategies, the potential challenges of implementation, and the importance of balancing data usage with privacy concerns. 9. Conclude the activity by summarizing key points about data privacy in AI applications.
Conclusion / What has been achieved	This activity enables participants develop a deeper understanding of the importance of data privacy in AI applications and the risks of mishandling customer data.

Tips

- Monitor student progress during the activity and provide support as needed.
- Evaluate student understanding through class participation, completion of handouts, and verbal responses during review and application.

Elaborate

- Elaborate the following topics:
  - Importance of Transparency in AI Applications
  - Ethical Impact of AI Applications in Retail
  - Use of Generative AI for Marketing and Customized Purchasing Experiences
  - Integration of Blockchain, IoT (Internet of Things), and AI

Ask

- How important is transparency when implementing AI systems in retail, and what does it involve?
- How can AI in retail impact customers ethically, both positively and negatively?
- How can generative AI enhance marketing and create personalized shopping experiences?
- What is IoT, and can you give an example of how it's used in retail?

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Summary

- Summarize the session.
- Prepare a list of participant's doubts if they have any. Encourage them to ask questions.
- Answer their queries.

Exercise

1. Instruct the trainees to open their Participant Handbook and complete the exercise given in Module 7.
2. Ensure that the participants have opened the correct page for the activity.
3. Give them 20 minutes to complete the exercise.
4. Exercise Hints:

   Multiple-choice Questions:

   1. Risk of unauthorized access and misuse of data
   2. It erodes customer trust due to lack of transparency

   Answer the following questions:

   1. **Explain the importance of data privacy in AI applications.**
      Hint: Refer to 7.1.3 in the participant handbook
   2. **What are the ethical concerns associated with integration of AI in retail sector?**
      Hint: Refer to 7.1.1 in the participant handbook

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Ethical Implications of AI Integration in Retail

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8. Future Trends

Unit 8.1 Emerging Trends in AI

Key Learning Outcomes

At the end of this module, the trainee will be able to:

1. Discuss the emerging trends in AI for retail in,
    - use of computer vision in cashier less stores and
    - AI-powered virtual try-ons
3. Discuss the potential for AI to revolutionize the retail industry in the future

Unit 8.1 Emerging Trends in AI

Unit Objectives

At the end of this unit, the trainee will be able to:

1. Discuss the emerging trends in AI for retail industry

   Examples: cashier less stores and AI-powered virtual try-ons
2. Explain the application of computer vision in cashier less stores, showcasing how AI can enable hassle free shopping experiences without the need for traditional checkouts
3. Explaining the use of AI-powered virtual try-ons in retail, showcasing how these technologies enhance the customer experience by allowing virtual exploration of products before purchase
4. Discuss strategic approaches for integrating AI technologies into various aspects of retail operations
5. Discuss the potential future developments and advancement in AI for retail

Resources to be Used

- Participant Handbook
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

Do

- Enter the class ten minutes before the session begins.
- Welcome and greet the participants.
- Take the daily attendance.
- Maintain the record of assessment scores.

Say

- Start the class by saying, “This unit will help you to understand explore the emerging trends in AI, and the latest advancements and their potential impact on the retail industry.”

Explain

- Explain the following topics:
  - Emerging Trends in AI for Retail Industry
  - Application of Computer Vision in Cashier-less Stores
  - Use of AI-powered Virtual Try-ons in Retail

Ask

- What are some emerging trends in AI that could shape the future of retail?
- How is computer vision used in cashier-less stores, and what are its benefits?
- How do AI-powered virtual try-ons enhance the shopping experience for customers?

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Elaborate

- Elaborate the following topics:
  - Strategic Approaches for Integrating AI Technologies into Various Aspects of Retail Operations
  - Potential Future Developments and Advancements in AI for Retail
  - Ethical and Legal Compliance in AI

Ask

- What are some strategies for successfully integrating AI into retail operations?
- What advancements in AI do you think will have the most impact on retail in the future?
- Why is it important for retailers to ensure their AI systems are ethically and legally compliant?

Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

Say

- "Let's move on to an activity where we will explore the future of retail with cashier-less stores and virtual shopping experiences."

Activity

Objective	This activity aims to encourage participants to discuss and analyze the long-term impact of AI-driven cashier-less stores and virtual retail on customer experiences, operational efficiency, and the retail industry.
Materials required	• Presentation slides or brief case studies on existing cashier-less store models (e.g., Amazon Go, Reliance Smart Point) and virtual retail experiences • Whiteboard or flip chart to note key discussion points • Markers or pens

Steps/procedure	1. Begin by explaining how AI is transforming traditional retail formats through cashier-less stores (using computer vision, sensors, and AI-powered checkout systems) and virtual retail (including AR/VR shopping experiences).
	2. Provide real-world examples:
	  ○ Cashier-less Stores: Amazon Go uses AI-powered Just Walk Out technology to eliminate checkout lines.
	  ○ Virtual Retail: IKEA's AR-powered app allows customers to visualize furniture in their homes before purchasing.
	3. Discuss the potential advantages and challenges of these AI-driven innovations.
	4. Divide participants into small groups and assign discussion points related to the future of AI in retail.
	  ○ How will cashier-less stores impact the role of retail employees?
	  ○ Will virtual retail completely replace physical shopping experiences?
	  ○ How will these technologies enhance customer experience and convenience?
	  ○ What are the challenges (e.g., security concerns, job displacement, technology adoption barriers)?
	  ○ How can small retailers adopt similar AI innovations cost-effectively?
	5. After discussions, groups will share their insights with the entire class, summarizing their key takeaways.
	6. Summarize the key themes emerging from the discussion, highlighting both opportunities and challenges of AI-powered cashier-less stores and virtual retail.
	7. Encourage participants to reflect on how AI will shape future retail careers and business strategies.

Conclusion / What has been achieved	This activity enables participants gain insights into the evolving role of AI in retail and its long-term impact.

Tips

- Monitor student progress during the activity and provide support as needed.
- Evaluate student understanding through class participation, completion of handouts, and verbal responses during review and application.

Summary

- Summarize the session.
- Prepare a list of participant's doubts if they have any. Encourage them to ask questions.
- Answer their queries.

Exercise

1. Instruct the trainees to open their Participant Handbook and complete the exercise given in Module 8.
2. Ensure that the participants have opened the correct page for the activity.
3. Give them 20 minutes to complete the exercise.
4. Exercise Hints:

   Multiple-choice Questions:

   1. Computer Vision
   2. By enabling real-time visualization of products on customers

   Answer the following questions:

   1. **List some emerging trends in AI for the retail industry.**
      Hint: Refer to 8.1.1 in the participant handbook
   2. **What is meant by computer vision?**
      Hint: Refer to 8.1.2 in the participant handbook

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Emerging Trends in AI

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10. Annexures

Annexure I: Training Delivery Plan

Annexure II: Assessment Criteria

Annexure III: QR Codes

Annexure I

Training Delivery Plan

Training Delivery Plan			
Program Name:	Fundamentals of Artificial Intelligence (AI) for Retail		
Qualification Pack Name & Ref. ID	RAS/MCr-0001		
Version No.	1.0	**Version Update Date**	27-08-2024
Pre-requisites to Training (if any)	NIL		
Training Outcomes	**At the end of the program, the learner should have acquired the listed knowledge and skills:** 1. Elucidate core principles and fundamental concepts of Artificial Intelligence (AI) 2. Outline the various applications of AI in retail 3. Identify the role of data in unleashing the power of AI 4. Explain the role AI can play in personalising the customer shopping experience 5. Identify the benefits of application of AI in various functions of retail operations management 6. Discuss the ethical and privacy considerations in implementing AI based interventions 7. Analyse real-world examples and case studies of successful AI implementations in the retail sector		

Sl. No.	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
1.	Basics of AI	Concepts of Artificial Intelligence (AI)	• Define artificial intelligence (AI) and its core concepts and fundamental principles • List various types of AI applications • Distinguish between Narrow AI and general AI • Discuss the relationship between AI and machine learning • Explain how machine learning functions as a crucial subset of AI	NA	Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion	LCD Projector, Laptop/ Computer with internet, White Board, Flip Chart, Markers, and duster	3 Theory 01: 00 Practical 02: 00
2.	Applications of AI in Retail	Role of AI and Data Analytics in Retail	• Outline the role of AI in the retail sector • Discuss the role of AI in recommendation systems for product suggestions in the retail industry • Discuss various ways artificial intelligence (AI) is being used in the retail industry, with a focus on demand forecasting, inventory control, pricing optimization, and customer service • Explain the role of data in AI applications within the retail sector • Explain the concept of data mining, and its ability and the techniques to uncover meaningful insights of retail data	NA	Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion	LCD Projector, Laptop/ Computer with internet, White Board, Flip Chart, Markers, and duster	4 Theory 02: 00 Practical 02: 00

Sl. No.	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
3.	Customer Insights and Personalization	Customer Segmentation for Enhanced Retail Experience	• Explain the concept of customer segmentation and its significance in organised retail • Explain the principles and elements of artificial intelligence (AI) that aid in analyzing customer data to create personalized shopping experience • Discuss the impact of AI-driven customer data analysis and segmentation on the overall shopping experience, considering factors such as customer satisfaction and loyalty	NA	Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion	LCD Projector, Laptop/ Computer with internet, White Board, Flip Chart, Markers, Trainer Chair & Table, Demonstration Table, Pin Up Boards	5 Theory 02: 00 Practical 03: 00
4.	Role of AI in Inventory and Supply Chain Management	AI Applications in Supply Chain and Inventory Management	• Explain the aspect of AI that contributes towards optimizing inventory management and supply chain operations • Discuss the impact of AI on efficiency, cost-effectiveness, and overall supply chain performance • Discuss the role of predictive analytics in the context of stock management • Discuss the impact of AI-driven inventory optimization and predictive analytics on stock efficiency, considering factors such as cost reduction, improved order fulfillment, and enhanced customer satisfaction	NA	Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion	LCD Projector, Laptop/ Computer with internet, White Board, Flip Chart, Markers, Trainer Chair & Table, Demonstration Table, Pin Up Boards	5 Theory 02: 00 Practical 03: 00

Sl. No.	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		AI Applications in Supply Chain and Inventory Management (Contd..)	• Describe the role of AI in improving Logistics and delivery processes in retail • Describe the ways through which supply chain improvement is achieved through applications of AI Technologies • Discuss the use of AI in route optimization and demand forecasting • Describe the several ways through which the AI address challenges such as inventory management, order fulfillment, and delivery scheduling	NA	Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion	LCD Projector, Laptop/ Computer with internet, White Board, Flip Chart, Markers, Trainer Chair & Table, Demonstration Table, Pin Up Boards	4 Theory 01: 00 Practical 03: 00
5.	Pricing Strategies and AI	AI-Driven Pricing Strategies	• Discuss the concept of dynamic pricing and the use of artificial intelligence (AI) in setting pricing strategies • Explaining the use of AI technologies that contribute towards setting competitive pricing strategies • Define the concept of price elasticity • Explain the concept of price elasticity in the context of pricing strategies • Describe various AI techniques used to optimize pricing based on demand fluctuations • Discuss the impact of AI-driven pricing strategies on efficiency, revenue, and customer satisfaction, considering factors such as responsiveness to market changes and competitiveness	NA	Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion	LCD Projector, Laptop/ Computer with internet, White Board, Flip Chart, Markers, Trainer Chair & Table, Demonstration Table, Pin Up Boards	3 Theory 03: 00 Practical 00: 00

Sl. No.	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
6.	Customer Service and Chatbots	AI in Customer Service	• Describe the role of artificial intelligence (AI) in customer support, specifically focusing on the contributions of AI-powered chatbots and virtual assistants in enhancing customer interactions and support services • Explain the functionalities and capabilities of AI-powered chatbots and virtual assistants • Discuss the benefits and limitations of using AI in addressing customer concerns • Discuss the impact of AI-powered chatbots and virtual assistants on customer support services, considering factors such as response time, accuracy, and customer feedback	NA	Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion	LCD Projector, Laptop/ Computer with internet, White Board, Flip Chart, Markers, Trainer Chair & Table, Demonstration Table, Pin Up Boards	4 Theory 02: 00 Practical 02: 00
7.	Ethical and Privacy Considerations	Ethical Implications of AI Integration in Retail	• Discuss the ethical concerns associated with the integration of AI in the retail sector • Explain the ethical principles to address concerns related to AI in retail • Explain the importance of data privacy in AI applications • Explain the importance of transparency in AI applications, emphasizing the need for clear communication and fairness in AI applications	NA	Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion	LCD Projector, Laptop/ Computer with internet, White Board, Flip Chart, Markers, Trainer Chair & Table, Demonstration Table, Pin Up Boards	1 Theory 01: 00 Practical 00: 00

Sl. No.	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
			• Discuss the ethical impact of AI applications in retail, considering factors such as fairness, transparency, and the protection of user rights				
8.	Future Trends	Emerging Trends in AI	• Discuss the emerging trends in AI for retail industry • Examples: cashier less stores and AI-powered virtual try-ons • Explain the application of computer vision in cashier less stores, showcasing how AI can enable hassle free shopping experiences without the need for traditional checkouts • Explaining the use of AI-powered virtual try-ons in retail, showcasing how these technologies enhance the customer experience by allowing virtual exploration of products before purchase • Discuss strategic approaches for integrating AI technologies into various aspects of retail operations • Discuss the potential future developments and advancement in AI for retail	NA	Classroom lecture/ Power-Point Presentation/ Question & Answer and Group Discussion	LCD Projector, Laptop/ Computer with internet, White Board, Flip Chart, Markers, Trainer Chair & Table, Demonstration Table, Pin Up Boards	1 Theory 01: 00 Practical 00: 00
						Theory	**15:00**
						Practical	**15:00**
						Total Duration	**30:00**

Annexure II

Assessment Criteria

CRITERIA FOR ASSESSMENT OF TRAINEES

Assessment Criteria for Fundamentals of Artificial Intelligence (AI) for Retail	
Job Role	**Fundamentals of Artificial Intelligence (AI) for Retail**
Qualification Pack	**RAS/MCr-0001, V1.0**
Sector Skill Council	**Retailers Association's Skill Council of India**

CRITERIA FOR ASSESSMENT OF TRAINEES

S. No.	Guidelines for Assessment
1.	Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council.
2.	Each Element/ Performance Criteria (PC) will be assigned marks proportional to its importance in NOS.
3.	SSC will lay down proportion of marks for Theory and Skills Practical for each Element/ PC.
4.	Individual NCVET recognised assessment agencies will prepare the theory and practical question papers.
5.	The assessments will be conducted by individual NCVET recognised assessment agencies as per the SOP.
6.	Every learner/ candidate appearing for the assessment must possess the OJT completion certificate from the employer to undertake the assessments under this qualification.
7.	The assessment for the theory and practical will be conducted online on a digital assessment platform with comprehensive auditable trails.
8.	Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/ option NOS/set of NOS.
9.	To pass the Qualification Pack assessment, every trainee should score a minimum of 60% aggregate passing percentage recommended at QP Level.
10.	In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.
11.	For detailed guidelines SOP on assessments can be referred to on the RASCI website.

Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Passing Percentage
50	50	-	-	100	60

Annexure III

QR Codes

Module No.	Unit No.	Topic Name	Page No	Link for QR Code (s)	QR code (s)
1. Basics of AI	Unit 1.1 Concepts of Artificial Intelligence (AI)	Concepts of Artificial Intelligence (AI)	6	https://youtu.be/uMzUB89uSxU?si=cNe_qnbp8LMsqeci	
2. Applications of AI in Retail	Unit 2.1 Role of AI and Data Analytics in Retail	Role of AI and Data Analytics in Retail	12	youtu.be/olbnLxxsp_o?si=K-fydcanEaAz6qV5C	
2. Applications of AI in Retail	Unit 2.1 Role of AI and Data Analytics in Retail		12	youtu.be/cQxOcSD-M6gw?si=xEY3GRG3S35c5U-uq	
3. Customer Insights and Personalization	Unit 3.1 Customer Segmentation for Enhanced Retail Experience	Customer Segmentation for Enhanced Retail Experience	18	youtu.be/tmQiOhkeI-7U?si=RWfhviRa7ExfqOeO	
4. Role of AI in Inventory and Supply Chain Management	Unit 4.1 AI Applications in Supply Chain and Inventory Management	AI Applications in Supply Chain and Inventory Management	25	youtu.be/YE4EdRjU37o?si=gP3Y71Bwt9DIqtA6	
6. Customer Service and Chatbots	Unit 6.1 AI in Customer Service	AI in Customer Service	38	youtu.be/NriwgFFX-fJ4?si=-MasxqWx2ETEeNei	

Module No.	Unit No.	Topic Name	Page No	Link for QR Code (s)	QR code (s)
6. Customer Service and Chatbots	Unit 6.1 AI in Customer Service	AI in Customer Service	38	youtu.be/Nriwg FFXfJ4?si=Hn0Y lq1HPbkdy_r7	
7. Ethical and Privacy Considerations	Unit 7.1 Ethical Implications of AI Integration in Retail	Ethical Implications of AI Integration in Retail	45	youtu.be/6yDr7CWLJ8c?si=x-OYeTsuorXtqbi8V	
8. Emerging Trends in AI for Retail Industry	Unit 8.1 Emerging Trends in AI	Emerging Trends in AI	51	youtu.be/wKWQfjmEY-fM?si=w7H1OF4H4PKf_XiQ	
			51	youtu.be/Vz-VbA22x-Ow?si=ikSB12ID-wBKsWGg	

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