





# **Model Curriculum**

**NOS Name: Introduction to Retail Data Analytics** 

NOS Code: RAS/N0178

**NOS Version: 1.0** 

**NSQF Level: 4.5** 

**Model Curriculum Version: 1.0** 

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## **Training Parameters**

| Sector   | Retail  |
|--|---|
| Sub-Sector                                       | Retail Operations   |
| Occupation                                       | Store Operations  |
| Country  | India   |
| NSQF Level                                       | 4.5   |
| Aligned to NCO/ISCO/ISIC Code                    | NA  |
| Minimum Educational Qualification and Experience | <ul> <li>Completed or pursuing 1st year of 3 year/ 4 year UG or equivalent in Business Analytics or related fields (e.g., Data Science, Retail Management with Analytics specialization).</li> <li>12th Grade pass with 1.5 year of relevant experience in retail operations. (Proficiency in basic computer usage, including spreadsheets such as Excel).</li> <li>Previous relevant Qualification of NSQF Level 4 with 1.5-year relevant experience in retail operations.</li> <li>Previous relevant Qualification of NSQF Level 3.5 with 3-year relevant experience in retail operations.</li> </ul> |
| Pre-Requisite License or Training                | NIL   |
| Minimum Job Entry Age                            | -   |
| Last Reviewed On                                 | NA  |
| Next Review Date                                 | 08/05/2028  |
| NSQC Approval Date                               | 08/05/2025  |
| QP Version                                       | 1.0   |
| Model Curriculum Creation Date                   | 19/10/2024  |
| Model Curriculum Valid Up to Date                | 08/05/2028  |
| Model Curriculum Version                         | 1.0   |





| Minimum Duration of the Course | 120 hours |
|--------------------------------|-----------|
| Maximum Duration of the Course | 120 hours |





### **Program Overview**

The "Basics of Retail Data Analytics and Consumer Insights" program equips participants with the essential skills to collect, organize, and analyze basic retail data, supporting effective decision-making in retail environments. The program emphasizes understanding sales trends, consumer behavior, and customer feedback to enhance operations, product assortment, pricing strategies, and promotions.

### **Training Outcomes**

At the end of the program, the learner should have acquired the listed knowledge and skills.

- Collect and organize basic retail data from tools like POS systems, spreadsheets, and customer databases.
- Analyze sales trends and consumer behavior data to generate basic insights that support retail operations and decision-making.
- Understand the role of consumer feedback and surveys in gathering insights to enhance customer satisfaction and business performance.
- Apply basic data-driven decision-making processes to improve product assortment, pricing, and promotions in retail.
- Present basic data insights through simple visualizations and reports to retail teams for decision-making.
- Adhere to basic data privacy principles and understand ethical practices in data management for retail.





### **Compulsory Modules**

The table lists the modules and their duration corresponding to the Compulsory NOS of the QP.

| NOS and Module Details                                       | Theory<br>Duration | Practical<br>Duration | OJT Duration<br>(Mandatory) | Total<br>Duration |
|--|--------------------|-----------------------|-----------------------------|-------------------|
| Module 1: Fundamentals of Retail Data Analytics              | 10:00              | 16:00                 | -                           | 26:00             |
| Module 2: Basics of Consumer Insights and Feedback Tools     | 10:00              | 16:00                 | -                           | 26:00             |
| Module 3: Basic Sales Trend Analysis                         | 10:00              | 16:00                 | -                           | 26:00             |
| Module 4: Data-Driven Decision Making in Retail              | 08:00              | 12:00                 | -                           | 20:00             |
| Module 5: Basic Data Visualization and Reporting             | 08:00              | 08:00                 | -                           | 16:00             |
| Module 6: Introduction to Data Privacy, Ethics, and Security | 04:00              | 02:00                 | -                           | 06:00             |
| Total Duration   | 50:00              | 70:00                 | -                           | 120:00            |





### **Module Details**

### Module 1: Fundamentals of Retail Data Analytics

#### **Terminal Outcomes:**

List the types of retail data, basic tools for data collection, and the role of data analytics in retail operations.

|   | Duration: 10:00   | Duration: 16:00   |
|---|---|---|
| <ul> <li>sales, customer, inventory data) and their sources.</li> <li>Explain the importance of retail data analytics in decision-making.</li> <li>Identify basic tools for data collection such as POS systems, spreadsheets, and CRM systems.</li> <li>Explain key concepts such as data integrity and accuracy when collecting retail data.</li> <li>Explain how retail data impacts pricing, promotions, and product management decisions.</li> <li>Explain how qualitative data (e.g., customer feedback) complements quantitative retail</li> </ul> | Theory – Key Learning Outcomes  | Practical – Key Learning Outcomes   |
|   | <ul> <li>sales, customer, inventory data) and their sources.</li> <li>Explain the importance of retail data analytics in decision-making.</li> <li>Identify basic tools for data collection such as POS systems, spreadsheets, and CRM systems.</li> <li>Explain key concepts such as data integrity and accuracy when collecting retail data.</li> <li>Explain how retail data impacts pricing, promotions, and product management decisions.</li> <li>Explain how qualitative data (e.g., customer feedback) complements quantitative retail</li> </ul> | <ul> <li>organize sales data in Excel or Google Sheets.</li> <li>Simulate the data entry process using a retail POS system and validate accuracy.</li> <li>Prepare simple reports from organized data on sales, customer transactions,</li> </ul> |

LCD Projector, Laptop/Computer with internet, White Board, Flip Chart, Markers, and duster

#### **Tools, Equipment and Other Requirements**

Spreadsheets (Excel/Google Sheets) – 20 licenses, POS system with sample transaction data – 2 machines, **CRM software** – 2 accounts





### **Module 2: Basics of Consumer Insights and Feedback Tools**

#### **Terminal Outcomes:**

 Gather and analyze basic consumer insights using feedback tools and qualitative data collection methods.

| Duration: 10:00   | Duration: 16:00  |
|---|--|
| Theory – Key Learning Outcomes  | Practical – Key Learning Outcomes  |
| <ul> <li>Discuss the basics of customer feedback surveys and how they gather qualitative data.</li> <li>Outline how to design simple surveys to collect customer opinions on products and services.</li> <li>Discuss the techniques to interpret customer feedback to make basic improvements in products or services.</li> <li>Explain the importance of customer satisfaction metrics (e.g., Net Promoter Score).</li> <li>Explain the role of qualitative data in complementing sales and transaction data.</li> <li>Identify tools like Google Analytics for tracking basic consumer interaction online.</li> </ul> | <ul> <li>Design a basic customer feedback survey for a simulated retail store.</li> <li>Analyze sample customer feedback data to generate insights for product or service improvement.</li> <li>Use a sample case study to interpret qualitative customer feedback and suggest actionable changes.</li> <li>Simulate the use of basic web analytics tools (e.g., Google Analytics) to track online consumer interactions.</li> </ul> |
| Classroom Aids  |  |

#### Classroom Aids

LCD Projector, Laptop/Computer with internet, White Board, Flip Chart, Markers, Trainer Chair & Table, Demonstration Table, Pin Up Boards

#### **Tools, Equipment and Other Requirements**

**Survey software (Google Forms/SurveyMonkey)** – 20 licenses, **Google Analytics** – 1 account with 20 users, **Customer feedback templates** – 20 computers





### **Module 3: Basic Sales Trend Analysis**

#### **Terminal Outcomes:**

Perform basic sales trend analysis and understand consumer behavior patterns using basic data analysis tools.

| Duration  | n: 10:00  | Duration: 16:00  |
|-----------|---|--|
| Theory -  | - Key Learning Outcomes   | Practical – Key Learning Outcomes  |
| •         | Define basic sales metrics like total sales, average transaction value, and sales growth rates.  Describe the characteristics of consumer demographics and purchase behavior in | <ul> <li>Use sample retail data to calculate sales growth and perform basic trend analysis in Excel.</li> <li>Interpret a case study on consumer behavior to identify patterns in purchasing decisions.</li> </ul> |
| •         | retail.  Discuss the external factors (e.g., seasons, holidays) influence sales trends.   | <ul> <li>Simulate the process of creating a customer profile based on demographic and transaction data.</li> <li>Prepare a report on sales trends and</li> </ul>   |
| •         | Classify how consumer preferences differ across product categories and regions.  Identify basic techniques to calculate sales trends and growth using spreadsheets.             | predict future demand based on historical data.  |
| •         | Explain the role of historical data in predicting future sales trends and consumer demand.  |  |
| • Classes | Summarise the basics of consumer segmentation for targeted promotions.  |  |

#### **Classroom Aids**

LCD Projector, Laptop/Computer with internet, White Board, Flip Chart, Markers, and duster

#### **Tools, Equipment and Other Requirements**

Excel/Google Sheets - 20 licenses, Sample consumer and sales datasets - 20 data sets, Case studies on retail consumer behavior – 5 case studies





### **Module 4: Data-Driven Decision Making in Retail**

#### **Terminal Outcomes:**

• Apply basic retail data to make decisions on product assortment, promotions, and inventory management.

| <ul> <li>Explain how basic data insights influence product</li> </ul>   | Practical – Key Learning Outcomes   |
|---|---|
| Explain how basic data insights influence product   |   |
| <ul> <li>assortment decisions in retail.</li> <li>Discuss how inventory levels and stock management are impacted by sales data.</li> <li>Summarise the importance of customer segmentation for targeted marketing campaigns.</li> <li>Discuss the elements of consumer data that aid in development of simple promotions.</li> <li>Identify the role of loyalty programs and promotions in driving repeat purchases.</li> <li>Recognize how data can highlight underperforming products and recommend discontinuation.</li> </ul> | <ul> <li>Analyze sample inventory data to recommend changes to stock levels and reorder points.</li> <li>Use case studies to develop basic promotion strategies using sales an consumer data.</li> <li>Prepare a report using simulated sales data to recommend product assortment changes.</li> <li>Evaluate the success of a loyalty program using sample customer data.</li> </ul> |
| Classroom Aids  |   |
| LCD Projector, Laptop/Computer with internet, White Box   | ard, Flip Chart, Markers, Trainer Chair &   |
| Table, Demonstration Table, Pin Up Boards   |   |
| Tools, Equipment and Other Requirements   |   |
| ventory management software – 20 licenses, Customer   | <b>segmentation tools</b> – 20 computers with   |





### **Module 5: Basic Data Visualization and Reporting**

#### **Terminal Outcomes:**

• Create simple visualizations and reports to communicate retail data insights.

| Duration: 08:00   | Duration: 08:00   |
|---|---|
| Theory – Key Learning Outcomes  | Practical – Key Learning Outcomes   |
| <ul> <li>Discuss the characteristics of basic data visualization techniques (e.g., bar charts, line graphs) for representing retail data.</li> <li>List the factors that help in presenting the data insights effectively using visual aids.</li> <li>Summarise the role of using tools like Excel and PowerPoint.</li> <li>Explain the importance of clear communication when presenting data insights to non-technical audiences.</li> <li>List the best practices for building a basic dashboard to track sales and customer metrics.</li> <li>Classroom Aids</li> </ul> | <ul> <li>Excel to represent sales and consumer data.</li> <li>Prepare a basic data report summarizing key insights from sales and customer data.</li> <li>Simulate presenting data findings using PowerPoint for decisionmaking in retail.</li> </ul> |
| LCD Projector, Laptop/Computer with internet, White Boa   | ard, Flip Chart, Markers, Trainer Chair &   |

LCD Projector, Laptop/Computer with internet, White Board, Flip Chart, Markers, Trainer Chair & Table, Demonstration Table, Pin Up Boards

#### **Tools, Equipment and Other Requirements**

Excel/Google Sheets – 20 licenses, PowerPoint or similar presentation software – 20 computers, Basic data visualization tools – 20 computers





### **Module 6: Introduction to Data Privacy, Ethics, and Security**

#### **Terminal Outcomes:**

Explain the basics of data privacy, ethics, and security in handling retail customer data.

| Duration: 04:00  | Duration: 02:00  |
|--|--|
| Theory – Key Learning Outcomes   | Practical – Key Learning Outcomes  |
| <ul> <li>State the basic principles of data privacy laws.</li> <li>List the ethical responsibilities of retail businesses in handling customer data.</li> <li>State the consequences of data breaches and how they impact retail businesses.</li> <li>Describe the basic security practices like encryption and password protection for data.</li> <li>Explain the need to anonymize customer data to protect their identities.</li> </ul> | <ul> <li>Simulate basic data security measures like password protection and encryption for customer data.</li> <li>Analyze a case study on data breaches and suggest preventive actions for retail businesses.</li> <li>Develop a basic data privacy policy for a simulated retail store.</li> </ul> |
| Classroom Aids   |  |
| LCD Projector, Laptop/Computer with internet, White Boards Table, Demonstration Table, Pin Up Boards   | ard, Flip Chart, Markers, Trainer Chair &  |
| Tools, Equipment and Other Requirements  |  |
| <b>Encryption software</b> – 1 system, <b>Data privacy policy temp</b><br>20 licenses  | lates – 20 copies, Risk assessment tools –   |





### **Annexure**

**Trainer Requirement** 

|                                     |   | Tr                           | ainer Prerequisites   |                        |                |  |
|-------------------------------------|---|------------------------------|---|------------------------|----------------|--|
| Minimum  Educational Specialization |   | Relevant Industry Experience |   | Training<br>Experience |                | Remarks  |
| Qualification                       |   | Years                        | Specialization  | Years                  | Specialization |  |
|                                     |   |                              | For Trainers  |                        |                |  |
| Graduate/<br>Postgraduate           | Retail<br>Management,<br>Business Analytics,<br>or related field. | 3                            | Retail operations, with exposure to basic data analytics tools (Excel, CRM, POS systems). |                        |                | Proficiency in<br>basic data<br>analytics, sale<br>trend analysis<br>and customer<br>feedback tool |

| Trainer Certification   |  |  |  |  |
|---|--|--|--|--|
| Domain Certification Platform Certification   |  |  |  |  |
| Certified for Standalone NOS "Introduction to Retail Data Analytics", mapped to NOS: "RAS/N0178, v1.0", Minimum accepted score is 80% | Recommended that the Trainer is certified for the Job Role "Trainer (VET and skills)", mapped to the Qualification Pack: "MEP/Q2601, v2.0". The minimum accepted score is 80%. |  |  |  |





### **Assessor Requirements**

| Assessors Prerequisites                 |   |                              |                |                        |  |  |  |  |
|---|---|------------------------------|----------------|------------------------|--|--|--|--|
| Minimum<br>Educational<br>Qualification | Specialization  | Relevant Industry Experience |                | Training<br>Experience |  | Remarks                                  |  |  |
|   |   | Years                        | Specialization | Years                  | Specialization   |  |  |  |
|   |   |                              | For Assessors  |                        |  |  |  |  |
| Graduate/<br>Postgraduate               | Retail<br>Management,<br>Business<br>Analytics, or<br>related field |                              |                | 3                      | Assessing retail operations and data analytics, with relevant certifications in data analysis tools. | understandin<br>of retail<br>operations, |  |  |

| Assessor Certification  |   |  |  |  |  |
|---|---|--|--|--|--|
| Domain Certification  | Platform Certification  |  |  |  |  |
| Certified for Standalone NOS "Introduction to Retail Data Analytics", mapped to NOS: "RAS/N0178, v1.0", Minimum accepted score is 80% | Recommended that the Assessor is certified for the Job Role: "Assessor (VET and skills)", mapped to the Qualification Pack: "MEP/Q2701, v2.0". The minimum accepted score is 80%. |  |  |  |  |





### **Assessment Strategy**

This section includes the processes involved in identifying, gathering and interpreting information to evaluate the learner on the required competencies of the program.

Assessment will be done by RASCI-affiliated assessment agencies. The assessors/proctors will be trained & certified by SSC through the Training of Assessors / Proctors program. The emphasis will be on practical skills and knowledge based on the performance criteria. The assessment papers are developed by Subject Matter Experts (SME), as per the assessment criteria mentioned in the Qualification Pack. The assessment papers are also checked for the various outcome-based parameters such as quality, time taken, precision, tools & equipment requirement, etc. The assessment sets are then reviewed by SSC officials for consistency.

#### **Testing Tools**

- Carry out assessments under realistic work pressures that are found in the normal industry workplace.
- Ensure that the range of materials, equipment and tools that learners use are current and of the type routinely found in the normal industry workplace environments.

| Assessment Type  | Formative or Summative | Strategies  |  |  |
|------------------|------------------------|---|--|--|
| Theory Summative |                        | (Web proctoring/Paper pencil/Tab based): Written test will be Multiple Choice Questions (MCQ) based. In case of availability of internet connectivity, the test will be hosted on the web (online). In case of the absence of internet connectivity, the test will be administered in offline mode on a tablet or via paper pencil. |  |  |
| Practical        | Summative              | This test will be administered through an online digital assessment platform in the form of case study or scenario-based Viva Voce, Role Play, or Demonstration.  |  |  |

The assessment results are backed by evidence collected by assessors.

- 1. The assessor/proctor must collect a copy of the attendance for the training under the scheme. The attendance sheets are signed and stamped by the in-charge / Head of the Training Centre.
- 2. The assessor/proctor needs to verify the authenticity of the candidates by checking the photo ID card issued by the institute as well as anyone Photo ID card issued by the Central/Government. The same needs to be mentioned in the attendance sheet. In case of suspicion, the assessor should authenticate and cross-verify the trainee's credentials in the enrolment form.





- 3. The assessor/proctor needs to punch the trainee's roll number on all the evidence.
- 4. The assessor/proctor can take a photograph of all the students along with the assessor standing in the middle and with the centre name/banner at the back as evidence.
- 5. The assessor also needs to carry his/her photo ID card.

The assessment agencies are instructed to hire assessors/proctors with integrity, reliability and fairness. Each assessor shall sign a document with its assessment agency by which they commit themselves to comply with the rules of confidentiality and conflict of interest, independence from commercial and other interests that would compromise the impartiality of the assessments.

#### **Assessment Strategy for Employability Skills**

The trainee will be tested for the acquired skill, knowledge and attitude through formative/summative assessment at the end of the course, and as this NOS and MC are adopted across sectors and qualifications, the respective AB can conduct the assessments as per their requirements.





### References

### **Glossary**

| Term                     | Description   |
|--------------------------|---|
| Declarative<br>Knowledge | Declarative knowledge refers to facts, concepts and principles that need to be known and/or understood in order to accomplish a task or to solve a problem.   |
| Key Learning<br>Outcome  | Key learning outcome is the statement of what a learner needs to know, understand and be able to do in order to achieve the terminal outcomes. A set of key learning outcomes will make up the training outcomes. Training outcome is specified in terms of knowledge, understanding (theory) and skills (practical application). |
| OJT (M)                  | On-the-job training (Mandatory); trainees are mandated to complete specified hours of training on site  |
| OJT (R)                  | On-the-job training (Recommended); trainees are recommended the specified hours of training on site   |
| Procedural<br>Knowledge  | Procedural knowledge addresses how to do something, or how to perform a task. It is the ability to work, or produce a tangible work output by applying cognitive, affective or psychomotor skills.  |
| Training Outcome         | Training outcome is a statement of what a learner will know, understand and be able to do upon the completion of the training.  |
| Terminal Outcome         | Terminal outcome is a statement of what a learner will know, understandand be able to do upon the completion of a module. A set of terminal outcomes help to achieve the training outcome.  |

### **Acronyms and Abbreviations**

| Term | Description                             |  |
|------|---|--|
| QP   | Qualification Pack                      |  |
| NSQF | National Skills Qualification Framework |  |
| NSQC | National Skills Qualification Committee |  |
| NOS  | National Occupational Standards         |  |