









# Basics of Product Catalogue Using Al Tools

Unit Code: RAS/N0315

Version: 1.0

NSOF Level: 4.5

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## **Description**

An individual in this role manages product listings by organizing categories and makes effective use of descriptions, images, and attributes for better searchability. They collaborate with vendors and marketing teams to maintain accurate data, ensure compliance with platform policies, and address issues promptly. By analyzing performance, they prepare reports and recommend updates to boost visibility, customer engagement, and sales

## Scope

The scope covers the following:

- Manage product listing and catalogue maintenance for e-commerce Platforms.
- Automate Tagging and Cataloguing
- Analyse and Enrich Data
- Assure Quality Control
- Engage Users and Ensure Security

#### **Elements and Performance Criteria**

#### Manage product listing and catalogue maintenance for e-commerce Platforms

To be competent, the user/individual on the job must be able to:

- **PC1.** Upload product information (name, description, specifications) accurately into e-commerce platforms
- **PC2.** Attach relevant product images that meet platform-specific size and quality standards
- **PC3.** Create product categories, tags, and attributes to optimize navigation and searchability
- **PC4.** Monitor product listings to ensure they are free of errors or inconsistencies
- **PC5.** Update product prices and discounts based on promotional campaigns or stock availability
- **PC6.** Add and manage variations (e.g., size, color) under the same product listing
- **PC7.** Collaborate with vendors or internal teams to ensure product data accuracy
- **PC8.** Perform seasonal updates to product catalogues, including uploading new products or modifying old listings
- **PC9.** Ensure product listings comply with platform policies, including prohibited products or content restrictions

#### Automate Tagging and Cataloguing

To be competent, the user/individual on the job must be able to:

- **PC10.** Utilize Al and machine learning algorithms to automate the tagging and categorization of digital assets
- PC11. Ensure efficient and accurate organization based on content, context, and metadata
- **PC12.** Implement and oversee the deployment of image and text recognition algorithms to identify and categorize multimedia content within digital assets.
- **PC13.** Maintain an intelligent search system incorporating natural language processing and machine learning
- **PC14.** Enable rapid and precise retrieval of digital assets based on user queries









- **PC15.** Establish systems that dynamically adjust catalogue structures based on user behaviour and usage patterns
- **PC16.** Ensure the catalogue evolves to meet the changing needs of users over time

#### Analyse and Enrich Data

To be competent, the user/individual on the job must be able to:

- **PC17.** Apply machine learning techniques to analyse user behaviour, historical data, and trends, enabling the prediction of popular or in-demand digital assets.
- **PC18.** Use insights to guide cataloguing priorities and content updates
- **PC19.** Implement IoT devices for real-time tracking of physical assets and seamlessly link them to their digital counterparts in the catalogue
- **PC20.** Ensure accurate representation and accessibility of physical assets
- **PC21.** Extract information from external sources and updating fields for improved catalogue organization
- **PC22.** Employ AI algorithms to automatically enrich metadata associated with digital assets

#### Assure Quality Control

To be competent, the user/individual on the job must be able to:

- **PC23.** Identifying issues such as image resolution, file format compliance, or broken links to maintain a high standard of asset quality
- PC24. Utilize Al algorithms to conduct quality control checks on digital assets

#### Engage Users and Ensure Security

To be competent, the user/individual on the job must be able to:

- **PC25.** Implement Al-driven analysis of user preferences and behaviours to deliver personalized content recommendations
- **PC26.** Enhance user engagement and satisfaction with the digital asset catalogue
- **PC27.** Employ anomaly detection and user behaviour analysis to ensure robust access control mechanisms
- **PC28.** Integrate Al-based security measures to detect and prevent unauthorized access to sensitive digital assets

#### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** Understand the structure and components of e-commerce product listings
- **KU2.** Know how to use different e-commerce platforms (e.g., Shopify, WooCommerce) to manage product data
- **KU3.** Familiarize with the importance of SEO-friendly product descriptions for improving searchability
- **KU4.** Learn about platform-specific requirements for product images (e.g., resolution, size)
- **KU5.** Understand how product categories and tags help in enhancing customer navigation and search
- **KU6.** Learn the basics of managing product variations (e.g., size, color) efficiently
- **KU7.** Know the importance of maintaining accurate pricing and promotional updates









- KU8. Understand compliance requirements regarding product listings and platform policies
- **KU9.** Familiarize with basic reporting on product performance (views, clicks, conversions)
- KU10. Basic Principles and concept of Artificial intelligence, Machine learning and their applications
- KU11. Fundamentals of the Internet of Things (IoT) and its applications
- **KU12.** Fundamentals and applications of image recognition algorithms
- KU13. Basics of natural language processing (NLP) and its role in digital asset management
- **KU14.** Role of user behaviour and usage patterns in influencing catalogue evolution
- **KU15.** Principles of Al-driven analysis of user preferences and behaviours
- KU16. Application of predictive analytics to forecast popular or in-demand digital assets
- **KU17.** Techniques for extracting information from external sources
- KU18. Explore Al-based security measures to detect and prevent unauthorized access

## **Generic Skills (GS)**

User/individual on the job needs to know how to:

- **GS1.** Demonstrate effective communication with vendors and internal teams for gathering product data
- **GS2.** Use basic e-commerce software tools for product uploads and updates
- **GS3.** Pay attention to detail when entering product data to avoid errors
- **GS4.** Solve common problems, such as duplicate listings or product mismatch issues
- **GS5.** Work collaboratively with marketing teams to coordinate promotions and product visibility
- **GS6.** Manage time efficiently to meet deadlines for product uploads during campaigns
- **GS7.** Adapt to different platform interfaces and tools used for listing management
- **GS8.** Follow ethical practices and guidelines for maintaining accurate product information
- **GS9.** Keep up with changing trends and policies in product listings and platform requirements
- **GS10.** Technical skills to use AI driven tools and machine learning applications
- **GS11.** Ability to perform statistical data analysis and interpret data
- **GS12.** Implement and customize AI algorithm for specific cases
- **GS13.** Technical skill required to design and maintain Digital Asset management system
- **GS14.** Implement Strategies for Maintaining Data Consistency and Integrity
- **GS15.** Technical skills required to detect image resolution issues, file format, compliance and broken links.
- **GS16.** Self-management skill to conduct user research and usability testing
- **GS17.** Implementing AI based security system









# **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Manage product listing and catalogue maintenance for e-commerce Platforms	40	60	-	-
<b>PC1.</b> Upload product information (name, description, specifications) accurately into ecommerce platforms	5	7	-	-
<b>PC2.</b> Attach relevant product images that meet platform-specific size and quality standards	5	7	-	-
<b>PC3.</b> Create product categories, tags, and attributes to optimize navigation and searchability	5	7	-	-
<b>PC4.</b> Monitor product listings to ensure they are free of errors or inconsistencies	5	7	_	-
PC5. Update product prices and discounts based on promotional campaigns or stock availability	4	7	-	-
<b>PC6.</b> Add and manage variations (e.g., size, color) under the same product listing	4	6	_	-
<b>PC7.</b> Collaborate with vendors or internal teams to ensure product data accuracy	5	7	-	-
<b>PC8.</b> Perform seasonal updates to product catalogues, including uploading new products or modifying old listings	3	6	-	-
<b>PC9.</b> Ensure product listings comply with platform policies, including prohibited products or content restrictions	4	6	-	-
Automate Tagging and Cataloguing	40	60	-	-
<b>PC10.</b> Utilize AI and machine learning algorithms to automate the tagging and categorization of digital assets	7	9	-	-
<b>PC11.</b> Ensure efficient and accurate organization based on content, context, and metadata	7	9	-	-
<b>PC12.</b> Implement and oversee the deployment of image and text recognition algorithms to identify and categorize multimedia content within digital assets.	7	9	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC13.</b> Maintain an intelligent search system incorporating natural language processing and machine learning	3	8	-	-
<b>PC14.</b> Enable rapid and precise retrieval of digital assets based on user queries	3	7	-	-
<b>PC15.</b> Establish systems that dynamically adjust catalogue structures based on user behaviour and usage patterns	7	9	-	-
<b>PC16.</b> Ensure the catalogue evolves to meet the changing needs of users over time	6	9	-	-
Analyse and Enrich Data	40	60	-	-
<b>PC17.</b> Apply machine learning techniques to analyse user behaviour, historical data, and trends, enabling the prediction of popular or indemand digital assets.	8	10	-	-
<b>PC18.</b> Use insights to guide cataloguing priorities and content updates	8	10	-	-
<b>PC19.</b> Implement IoT devices for real-time tracking of physical assets and seamlessly link them to their digital counterparts in the catalogue	8	10	-	-
<b>PC20.</b> Ensure accurate representation and accessibility of physical assets	4	10	-	-
<b>PC21.</b> Extract information from external sources and updating fields for improved catalogue organization	4	10	-	-
PC22. Employ AI algorithms to automatically enrich metadata associated with digital assets	8	10	-	-
Assure Quality Control	40	60	-	-
<b>PC23.</b> Identifying issues such as image resolution, file format compliance, or broken links to maintain a high standard of asset quality	20	30	-	-
PC24. Utilize AI algorithms to conduct quality control checks on digital assets	20	30	-	-
Engage Users and Ensure Security	40	60	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC25.</b> Implement Al-driven analysis of user preferences and behaviours to deliver personalized content recommendations	10	10	-	-
<b>PC26.</b> Enhance user engagement and satisfaction with the digital asset catalogue	10	20	-	-
<b>PC27.</b> Employ anomaly detection and user behaviour analysis to ensure robust access control mechanisms	10	20	-	-
<b>PC28.</b> Integrate Al-based security measures to detect and prevent unauthorized access to sensitive digital assets	10	10	-	-
NOS Total	200	300	-	-









# **National Occupational Standards (NOS) Parameters**

NOS Code	RAS/N0315
NOS Name	Basics of Product Catalogue Using Al Tools
Sector	Retail
Sub-Sector	
Occupation	Sales Operations, Store Operations, Marketing
NSQF Level	4.5
Credits	3
Minimum Job Entry Age	14
Minimum Educational Qualification & Experience	Completed 1st year of UG (UG Certificate) (In any discipline, with basic digital literacy skill)  OR  Pursuing 1st year of UG and continuous education (In any discipline, with basic digital literacy skill)  OR  12th grade Pass with 1.5 years of experience relevant experience in product catalogue creation and digital literacy skills  OR  Previous relevant Qualification of NSQF Level (4) with 1.5 years of experience Relevant experience in Retail operations  OR  Previous relevant Qualification of NSQF Level (3.5) with 3 Years of experience Relevant experience in retail operations
Version	1.0
Last Reviewed Date	08/05/2025
Next Review Date	08/05/2028
NSQC Clearance Date	08/05/2025
Reference code on NQR	NG-4.5-OR-04254-2025-V1-RASCI
NQR Version	1.0
CCN Category	1