

# Automotive Dealership Data Analyst

QP Code: ASC/Q1436

Version: 1.0

NSQF Level: 6

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## ASC/Q1436: Automotive Dealership Data Analyst

### Brief Job Description

Individual at this job is responsible for performing Sales and Service Data Analysis by using edge computing devices, analytical and statistical tools and developing the end-to-end architecture for data flow for effective data extraction.

### Personal Attributes

The person should be result oriented with good technical and analytical skills, should have Excellent Interpersonal Skills, communication and presentation skills and a good team player. They should have ability to manage projects, prioritizing of work and mentoring the budding engineers.

### Applicable National Occupational Standards (NOS)

#### Compulsory NOS:

1. [ASC/N9810: Manage work and resources \(Manufacturing\)](#)
2. [DGT/VSQ/N0103: Employability Skills \(90 Hours\)](#)
3. [ASC/N1462: Data Extraction and Collection from Automotive Sales, Service & Spare Parts](#)
4. [ASC/N1463: Data preparation and acquisition for analysis](#)
5. [ASC/N1464: Dashboarding of the Analysed data](#)

### Qualification Pack (QP) Parameters

<b>Sector</b>	Automotive
<b>Sub-Sector</b>	Automotive Vehicle Service
<b>Occupation</b>	Technical Service & Repair
<b>Country</b>	India
<b>NSQF Level</b>	6
<b>Credits</b>	21
<b>Aligned to NCO/ISCO/ISIC Code</b>	NCO-2015/3115.0602

<p><b>Minimum Educational Qualification &amp; Experience</b></p>	<p>12th grade pass with 2 year NTC/ CITS/NAC (data management, coding, etc) with 5 Years of experience In relevant field OR Completed 3 year diploma after 10th (Mechanical/Automobile/ Electrical / Electronics) with 5 Years of experience In relevant field OR B.E./B.Tech with 1 Year of experience In relevant field OR Certificate-NSQF (Four wheeler Service Lead Technician Level 5/ Automotive Service Advisor Level 6) with 3 Years of experience In relevant field</p>
<p><b>Minimum Level of Education for Training in School</b></p>	<p>Not Applicable</p>
<p><b>Pre-Requisite License or Training</b></p>	<p>NA</p>
<p><b>Minimum Job Entry Age</b></p>	<p>22 Years</p>
<p><b>Last Reviewed On</b></p>	<p>05-01-2023</p>
<p><b>Next Review Date</b></p>	<p>05-01-2026</p>
<p><b>NSQC Approval Date</b></p>	<p></p>
<p><b>Version</b></p>	<p>1.0</p>

## ASC/N9810: Manage work and resources (Manufacturing)

### Description

This NOS unit is about implementing safety, planning work, adopting sustainable practices for optimising the use of resources.

### Scope

The scope covers the following :

- Maintain safe and secure working environment
- Maintain Health and Hygiene
- Effective waste management practices
- Material/energy conservation practices

### Elements and Performance Criteria

#### *Maintain safe and secure working environment*

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

- PC1.** identify hazardous activities and the possible causes of risks or accidents in the workplace
- PC2.** implement safe working practices for dealing with hazards to ensure safety of self and others
- PC3.** conduct regular checks of the machines with support of the maintenance team to identify potential hazards
- PC4.** ensure that all the tools/equipment/fasteners/spare parts are arranged as per specifications/utility into proper trays, cabinets, lockers as mentioned in the 5S guidelines/work instructions
- PC5.** organise safety drills or training sessions to create awareness amongst others on the identified risks and safety practices
- PC6.** fill daily check sheet to report improvements done and risks identified
- PC7.** ensure that relevant safety boards/signs are placed on the shop floor for the safety of self and others
- PC8.** report any identified breaches in health, safety and security policies and procedures to the designated person

#### *Maintain Health and Hygiene*

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

- PC9.** ensure workplace, equipment, restrooms etc. are sanitized regularly
- PC10.** ensure team is aware about hygiene and sanitation regulations and following them on the shop floor
- PC11.** ensure availability of running water, hand wash and alcohol-based sanitizers at the workplace
- PC12.** report advanced hygiene and sanitation issues to appropriate authority
- PC13.** follow stress and anxiety management techniques and support employees to cope with stress, anxiety etc
- PC14.** wear and dispose PPEs regularly and appropriately

#### *Effective waste management practices*

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

**PC15.** ensure recyclable, non-recyclable and hazardous wastes are segregated as per SOP

**PC16.** ensure proper mechanism is followed while collecting and disposing of non-recyclable, recyclable and reusable waste

#### *Material/energy conservation practices*

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

**PC17.** ensure malfunctioning (fumes/sparks/emission/vibration/noise) and lapse in maintenance of equipment are resolved effectively

**PC18.** prepare and analyze material and energy audit reports to decipher excessive consumption of material and water

**PC19.** identify possibilities of using renewable energy and environment friendly fuels

**PC20.** identify processes where material and energy/electricity utilization can be optimized

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

The individual on the job needs to know and understand:

**KU1.** organisation procedures for health, safety and security, individual role and responsibilities in this context

**KU2.** the organisation's emergency procedures for different emergency situations and the importance of following the same

**KU3.** evacuation procedures for workers and visitors

**KU4.** how and when to report hazards as well as the limits of responsibility for dealing with hazards

**KU5.** potential hazards, risks and threats based on the nature of work

**KU6.** various types of fire extinguisher

**KU7.** various types of safety signs and their meaning

**KU8.** appropriate first aid treatment relevant to different condition e.g. bleeding, minor burns, eye injuries etc.

**KU9.** relevant standards, procedures and policies related to 5S followed in the company

**KU10.** the various materials used and their storage norms

**KU11.** importance of efficient utilisation of material and water

**KU12.** basics of electricity and prevalent energy efficient devices

**KU13.** common practices of conserving electricity

**KU14.** common sources and ways to minimize pollution

**KU15.** categorisation of waste into dry, wet, recyclable, non-recyclable and items of single-use plastics

**KU16.** waste management techniques

**KU17.** significance of greening

### **Generic Skills (GS)**

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

- GS1.** read safety instructions/guidelines
- GS2.** modify work practices to improve them
- GS3.** work with supervisors/team members to carry out work related tasks
- GS4.** complete tasks efficiently and accurately within stipulated time
- GS5.** inform/report to concerned person in case of any problem
- GS6.** make timely decisions for efficient utilization of resources
- GS7.** write reports such as accident report, in at least English/regional language

## Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Maintain safe and secure working environment</i>	<b>20</b>	<b>13</b>	-	<b>8</b>
<b>PC1.</b> identify hazardous activities and the possible causes of risks or accidents in the workplace	4	2	-	2
<b>PC2.</b> implement safe working practices for dealing with hazards to ensure safety of self and others	3	1	-	2
<b>PC3.</b> conduct regular checks of the machines with support of the maintenance team to identify potential hazards	2	2	-	1
<b>PC4.</b> ensure that all the tools/equipment/fasteners/spare parts are arranged as per specifications/utility into proper trays, cabinets, lockers as mentioned in the 5S guidelines/work instructions	3	2	-	1
<b>PC5.</b> organise safety drills or training sessions to create awareness amongst others on the identified risks and safety practices	2	-	-	-
<b>PC6.</b> fill daily check sheet to report improvements done and risks identified	2	2	-	-
<b>PC7.</b> ensure that relevant safety boards/signs are placed on the shop floor for the safety of self and others	2	2	-	1
<b>PC8.</b> report any identified breaches in health, safety and security policies and procedures to the designated person	2	2	-	1
<i>Maintain Health and Hygiene</i>	<b>13</b>	<b>7</b>	-	<b>5</b>
<b>PC9.</b> ensure workplace, equipment, restrooms etc. are sanitized regularly	3	2	-	1
<b>PC10.</b> ensure team is aware about hygiene and sanitation regulations and following them on the shop floor	2	1	-	-
<b>PC11.</b> ensure availability of running water, hand wash and alcohol-based sanitizers at the workplace	2	2	-	1
<b>PC12.</b> report advanced hygiene and sanitation issues to appropriate authority	1	1	-	1



<b>Assessment Criteria for Outcomes</b>	<b>Theory Marks</b>	<b>Practical Marks</b>	<b>Project Marks</b>	<b>Viva Marks</b>
<b>PC13.</b> follow stress and anxiety management techniques and support employees to cope with stress, anxiety etc	2	1	-	1
<b>PC14.</b> wear and dispose PPEs regularly and appropriately	3	-	-	1
<i>Effective waste management practices</i>	<b>6</b>	<b>4</b>	-	<b>1</b>
<b>PC15.</b> ensure recyclable, non-recyclable and hazardous wastes are segregated as per SOP	3	2	-	-
<b>PC16.</b> ensure proper mechanism is followed while collecting and disposing of non-recyclable, recyclable and reusable waste	3	2	-	1
<i>Material/energy conservation practices</i>	<b>11</b>	<b>6</b>	-	<b>6</b>
<b>PC17.</b> ensure malfunctioning (fumes/sparks/emission/vibration/noise) and lapse in maintenance of equipment are resolved effectively	2	2	-	1
<b>PC18.</b> prepare and analyze material and energy audit reports to decipher excessive consumption of material and water	3	2	-	1
<b>PC19.</b> identify possibilities of using renewable energy and environment friendly fuels	3	1	-	2
<b>PC20.</b> identify processes where material and energy/electricity utilization can be optimized	3	1	-	2
<b>NOS Total</b>	<b>50</b>	<b>30</b>	-	<b>20</b>

## National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	ASC/N9810
<b>NOS Name</b>	Manage work and resources (Manufacturing)
<b>Sector</b>	Automotive
<b>Sub-Sector</b>	Generic
<b>Occupation</b>	Generic
<b>NSQF Level</b>	5
<b>Credits</b>	2
<b>Version</b>	2.0
<b>Last Reviewed Date</b>	31/08/2021
<b>Next Review Date</b>	31/08/2024
<b>NSQF Clearance Date</b>	31/08/2021

## **DGT/VSQ/N0103: Employability Skills (90 Hours)**

### **Description**

This unit is about employability skills, Constitutional values, becoming a professional in the 21st Century, digital, financial, and legal literacy, diversity and Inclusion, English and communication skills, customer service, entrepreneurship, and apprenticeship, getting ready for jobs and career development.

### **Scope**

The scope covers the following :

- Introduction to Employability Skills
- Constitutional values - Citizenship
- Becoming a Professional in the 21st Century
- Basic English Skills
- Career Development & Goal Setting
- Communication Skills
- Diversity & Inclusion
- Financial and Legal Literacy
- Essential Digital Skills
- Entrepreneurship
- Customer Service
- Getting ready for Apprenticeship & Jobs

### **Elements and Performance Criteria**

#### *Introduction to Employability Skills*

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

- PC1.** understand the significance of employability skills in meeting the current job market requirement and future of work
- PC2.** identify and explore learning and employability relevant portals
- PC3.** research about the different industries, job market trends, latest skills required and the available opportunities

#### *Constitutional values - Citizenship*

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

- PC4.** recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.
- PC5.** follow environmentally sustainable practices

#### *Becoming a Professional in the 21st Century*

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

- PC6.** recognize the significance of 21st Century Skills for employment
- PC7.** practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life

**PC8.** adopt a continuous learning mindset for personal and professional development

*Basic English Skills*

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

**PC9.** use basic English for everyday conversation in different contexts, in person and over the telephone

**PC10.** read and understand routine information, notes, instructions, mails, letters etc. written in English

**PC11.** write short messages, notes, letters, e-mails etc. in English

*Career Development & Goal Setting*

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

**PC12.** identify career goals based on the skills, interests, knowledge, and personal attributes

**PC13.** prepare a career development plan with short- and long-term goals

*Communication Skills*

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

**PC14.** follow verbal and non-verbal communication etiquette while communicating in professional and public settings

**PC15.** use active listening techniques for effective communication

**PC16.** communicate in writing using appropriate style and format based on formal or informal requirements

**PC17.** work collaboratively with others in a team

*Diversity & Inclusion*

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

**PC18.** communicate and behave appropriately with all genders and PwD

**PC19.** escalate any issues related to sexual harassment at workplace according to POSH Act

*Financial and Legal Literacy*

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

**PC20.** identify and select reliable institutions for various financial products and services such as bank account, debit and credit cards, loans, insurance etc.

**PC21.** carry out offline and online financial transactions, safely and securely, using various methods and check the entries in the passbook

**PC22.** identify common components of salary and compute income, expenses, taxes, investments etc

**PC23.** identify relevant rights and laws and use legal aids to fight against legal exploitation

*Essential Digital Skills*

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

**PC24.** operate digital devices and use their features and applications securely and safely

**PC25.** carry out basic internet operations by connecting to the internet safely and securely, using the mobile data or other available networks through Bluetooth, Wi-Fi, etc.

**PC26.** display responsible online behaviour while using various social media platforms

**PC27.** create a personal email account, send and process received messages as per requirement

**PC28.** carry out basic procedures in documents, spreadsheets and presentations using respective and appropriate applications

**PC29.** utilize virtual collaboration tools to work effectively

### *Entrepreneurship*

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

- PC30.** identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research
- PC31.** develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion
- PC32.** identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity

### *Customer Service*

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

- PC33.** identify different types of customers and ways to communicate with them
- PC34.** identify and respond to customer requests and needs in a professional manner
- PC35.** use appropriate tools to collect customer feedback
- PC36.** follow appropriate hygiene and grooming standards

### *Getting ready for apprenticeship & Jobs*

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

- PC37.** create a professional Curriculum vitae (Résumé)
- PC38.** search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively
- PC39.** apply to identified job openings using offline /online methods as per requirement
- PC40.** answer questions politely, with clarity and confidence, during recruitment and selection
- PC41.** identify apprenticeship opportunities and register for it as per guidelines and requirements

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

The individual on the job needs to know and understand:

- KU1.** need for employability skills and different learning and employability related portals
- KU2.** various constitutional and personal values
- KU3.** different environmentally sustainable practices and their importance
- KU4.** Twenty first (21st) century skills and their importance
- KU5.** how to use English language for effective verbal (face to face and telephonic) and written communication in formal and informal set up
- KU6.** importance of career development and setting long- and short-term goals
- KU7.** about effective communication
- KU8.** POSH Act
- KU9.** Gender sensitivity and inclusivity
- KU10.** different types of financial institutes, products, and services
- KU11.** components of salary and how to compute income and expenditure
- KU12.** importance of maintaining safety and security in offline and online financial transactions
- KU13.** different legal rights and laws
- KU14.** different types of digital devices and the procedure to operate them safely and securely
- KU15.** how to create and operate an e- mail account

- KU16.** use applications such as word processors, spreadsheets etc.
- KU17.** how to identify business opportunities
- KU18.** types and needs of customers
- KU19.** how to apply for a job and prepare for an interview
- KU20.** apprenticeship scheme and the process of registering on apprenticeship portal

### **Generic Skills (GS)**

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

- GS1.** read and write different types of documents/instructions/correspondence in English and other languages
- GS2.** communicate effectively using appropriate language in formal and informal settings
- GS3.** behave politely and appropriately with all to maintain effective work relationship
- GS4.** how to work in a virtual mode, using various technological platforms
- GS5.** perform calculations efficiently
- GS6.** solve problems effectively
- GS7.** pay attention to details
- GS8.** manage time efficiently
- GS9.** maintain hygiene and sanitization to avoid infection

## Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Introduction to Employability Skills</i>	<b>1</b>	<b>1</b>	-	-
<b>PC1.</b> understand the significance of employability skills in meeting the current job market requirement and future of work	-	-	-	-
<b>PC2.</b> identify and explore learning and employability relevant portals	-	-	-	-
<b>PC3.</b> research about the different industries, job market trends, latest skills required and the available opportunities	-	-	-	-
<i>Constitutional values - Citizenship</i>	<b>1</b>	<b>1</b>	-	-
<b>PC4.</b> recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.	-	-	-	-
<b>PC5.</b> follow environmentally sustainable practices	-	-	-	-
<i>Becoming a Professional in the 21st Century</i>	<b>1</b>	<b>3</b>	-	-
<b>PC6.</b> recognize the significance of 21st Century Skills for employment	-	-	-	-
<b>PC7.</b> practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life	-	-	-	-
<b>PC8.</b> adopt a continuous learning mindset for personal and professional development	-	-	-	-
<i>Basic English Skills</i>	<b>3</b>	<b>4</b>	-	-
<b>PC9.</b> use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-

<b>Assessment Criteria for Outcomes</b>	<b>Theory Marks</b>	<b>Practical Marks</b>	<b>Project Marks</b>	<b>Viva Marks</b>
<b>PC10.</b> read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
<b>PC11.</b> write short messages, notes, letters, e-mails etc. in English	-	-	-	-
<i>Career Development &amp; Goal Setting</i>	<b>1</b>	<b>2</b>	-	-
<b>PC12.</b> identify career goals based on the skills, interests, knowledge, and personal attributes	-	-	-	-
<b>PC13.</b> prepare a career development plan with short- and long-term goals	-	-	-	-
<i>Communication Skills</i>	<b>2</b>	<b>2</b>	-	-
<b>PC14.</b> follow verbal and non-verbal communication etiquette while communicating in professional and public settings	-	-	-	-
<b>PC15.</b> use active listening techniques for effective communication	-	-	-	-
<b>PC16.</b> communicate in writing using appropriate style and format based on formal or informal requirements	-	-	-	-
<b>PC17.</b> work collaboratively with others in a team	-	-	-	-
<i>Diversity &amp; Inclusion</i>	<b>1</b>	<b>1</b>	-	-
<b>PC18.</b> communicate and behave appropriately with all genders and PwD	-	-	-	-
<b>PC19.</b> escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
<i>Financial and Legal Literacy</i>	<b>2</b>	<b>3</b>	-	-
<b>PC20.</b> identify and select reliable institutions for various financial products and services such as bank account, debit and credit cards, loans, insurance etc.	-	-	-	-
<b>PC21.</b> carry out offline and online financial transactions, safely and securely, using various methods and check the entries in the passbook	-	-	-	-



<b>Assessment Criteria for Outcomes</b>	<b>Theory Marks</b>	<b>Practical Marks</b>	<b>Project Marks</b>	<b>Viva Marks</b>
<b>PC22.</b> identify common components of salary and compute income, expenses, taxes, investments etc	-	-	-	-
<b>PC23.</b> identify relevant rights and laws and use legal aids to fight against legal exploitation	-	-	-	-
<i>Essential Digital Skills</i>	<b>3</b>	<b>5</b>	-	-
<b>PC24.</b> operate digital devices and use their features and applications securely and safely	-	-	-	-
<b>PC25.</b> carry out basic internet operations by connecting to the internet safely and securely, using the mobile data or other available networks through Bluetooth, Wi-Fi, etc.	-	-	-	-
<b>PC26.</b> display responsible online behaviour while using various social media platforms	-	-	-	-
<b>PC27.</b> create a personal email account, send and process received messages as per requirement	-	-	-	-
<b>PC28.</b> carry out basic procedures in documents, spreadsheets and presentations using respective and appropriate applications	-	-	-	-
<b>PC29.</b> utilize virtual collaboration tools to work effectively	-	-	-	-
<i>Entrepreneurship</i>	<b>2</b>	<b>3</b>	-	-
<b>PC30.</b> identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-	-
<b>PC31.</b> develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-	-
<b>PC32.</b> identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity	-	-	-	-
<i>Customer Service</i>	<b>1</b>	<b>2</b>	-	-
<b>PC33.</b> identify different types of customers and ways to communicate with them	-	-	-	-

<b>Assessment Criteria for Outcomes</b>	<b>Theory Marks</b>	<b>Practical Marks</b>	<b>Project Marks</b>	<b>Viva Marks</b>
<b>PC34.</b> identify and respond to customer requests and needs in a professional manner	-	-	-	-
<b>PC35.</b> use appropriate tools to collect customer feedback	-	-	-	-
<b>PC36.</b> follow appropriate hygiene and grooming standards	-	-	-	-
<i>Getting ready for apprenticeship &amp; Jobs</i>	<b>2</b>	<b>3</b>	-	-
<b>PC37.</b> create a professional Curriculum vitae (Résumé)	-	-	-	-
<b>PC38.</b> search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	-	-
<b>PC39.</b> apply to identified job openings using offline /online methods as per requirement	-	-	-	-
<b>PC40.</b> answer questions politely, with clarity and confidence, during recruitment and selection	-	-	-	-
<b>PC41.</b> identify apprenticeship opportunities and register for it as per guidelines and requirements	-	-	-	-
<b>NOS Total</b>	<b>20</b>	<b>30</b>	-	-

## National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	DGT/VSQ/N0103
<b>NOS Name</b>	Employability Skills (90 Hours)
<b>Sector</b>	Cross Sectoral
<b>Sub-Sector</b>	Professional Skills
<b>Occupation</b>	Employability
<b>NSQF Level</b>	5
<b>Credits</b>	3
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	31/01/2024
<b>Next Review Date</b>	31/01/2027
<b>NSQC Clearance Date</b>	31/01/2024

## **ASC/N1462: Data Extraction and Collection from Automotive Sales, Service & Spare Parts**

### **Description**

This NOS unit is about performing tasks related to collection and extraction of data from various dealership entities for answering relevant business questions.

### **Scope**

The scope covers the following :

- Assessing project requirements
- Designing of project outline and selection of various data attributes
- Selection of data integration platform to integrate the data from various department

### **Elements and Performance Criteria**

#### *Assessing project requirements*

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

- PC1.** • Evaluate the requirements of the business questions to be catered with either visualization platforms or  
• analytics and predictive modelling solutions
- PC2.** • Design data architecture for collection and extraction of data from various departments of dealership using  
• connectors and platforms
- PC3.** Assess all organizational processes related to the use of data and analytics in a dealership
- PC4.** Check that the existing setup is capable or not for data collection and analysis

#### *Designing of project outline and selection of various data attributes*

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

- PC5.** • Prepare a layout of project execution where it should defend the choice of technology and its cost in  
• dealership
- PC6.** • Prepare the outline of the development process and its requirements for both material and resources under  
• the guidance of manager
- PC7.** • Define various data attributes and what level of analytics is required to analyse data and deliver value with  
• the support of manager

#### *Selection of data integration platform to integrate the data from various department*

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

- PC8.** Identify suitable data integration tool according to the volume of data that need to be analysed
- PC9.** • Create an end-to-end data flow using ETL (Extract-Transform-Load) tool using different connectors for  
• different types of data sources
- PC10.** Create datawarehouse for data acquisition

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

The individual on the job needs to know and understand:

- KU1.** Organizational policies, procedures, and guidelines that relate to designing and maintaining databases
- KU2.** Organizational policies and procedures for sharing data
- KU3.** Organizational policies and procedures for documenting databases architectures and backup mechanisms
- KU4.** Who to involve while designing and developing the database architecture and pipelines for the solution
- KU5.** The range of standard platforms and tools available and how to use them
- KU6.** The database connectors and application connectors for application-cloud communications
- KU7.** The updated internal and external cybersecurity regulations
- KU8.** The impacts of network on the environment and human health
- KU9.** ETL tools like Talend, SQL Server Integration Services (SSIS), etc
- KU10.** Basics of SQL
- KU11.** Overview of Sales & Service core Processes
- KU12.** Process KPI of Automotive Sales, Service & Spare Parts

## **Generic Skills (GS)**

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

- GS1.** Follow instructions, guidelines, procedures, rules, and service level agreements
- GS2.** Listen effectively and communicate information accurately
- GS3.** Follow rule-based decision-making processes
- GS4.** Make decisions on suitable courses
- GS5.** Plan and organize the work to achieve targets and meet deadlines
- GS6.** Apply problem-solving approaches to different situations
- GS7.** Analyse the business impact and disseminate relevant information to others
- GS8.** Apply balanced judgments to different situations
- GS9.** Check the work is complete and free from errors

## Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Assessing project requirements</i>	<b>10</b>	<b>10</b>	-	<b>5</b>
<b>PC1.</b> <ul style="list-style-type: none"> <li>Evaluate the requirements of the business questions to be catered with either visualization platforms or</li> <li>analytics and predictive modelling solutions</li> </ul>	-	-	-	-
<b>PC2.</b> <ul style="list-style-type: none"> <li>Design data architecture for collection and extraction of data from various departments of dealership</li> <li>connectors and platforms</li> </ul>	-	-	-	-
<b>PC3.</b> Assess all organizational processes related to the use of data and analytics in a dealership	-	-	-	-
<b>PC4.</b> Check that the existing setup is capable or not for data collection and analysis	-	-	-	-
<i>Designing of project outline and selection of various data attributes</i>	<b>15</b>	<b>15</b>	-	<b>7</b>
<b>PC5.</b> <ul style="list-style-type: none"> <li>Prepare a layout of project execution where it should defend the choice of technology and its cost in</li> <li>dealership</li> </ul>	-	-	-	-
<b>PC6.</b> <ul style="list-style-type: none"> <li>Prepare the outline of the development process and its requirements for both material and resources under</li> <li>the guidance of manager</li> </ul>	-	-	-	-
<b>PC7.</b> <ul style="list-style-type: none"> <li>Define various data attributes and what level of analytics is required to analyse data and deliver value with</li> <li>the support of manager</li> </ul>	-	-	-	-
<i>Selection of data integration platform to integrate the data from various department</i>	<b>15</b>	<b>15</b>	-	<b>8</b>
<b>PC8.</b> Identify suitable data integration tool according to the volume of data that need to be analysed	-	-	-	-

<b>Assessment Criteria for Outcomes</b>	<b>Theory Marks</b>	<b>Practical Marks</b>	<b>Project Marks</b>	<b>Viva Marks</b>
<b>PC9.</b> <ul style="list-style-type: none"> <li>• Create an end-to-end data flow using ETL (Extract-Transform-Load) tool using different connectors for</li> <li>• different types of data sources</li> </ul>	-	-	-	-
<b>PC10.</b> Create datawarehouse for data acquisition	-	-	-	-
<b>NOS Total</b>	<b>40</b>	<b>40</b>	-	<b>20</b>

## National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	ASC/N1462
<b>NOS Name</b>	Data Extraction and Collection from Automotive Sales, Service & Spare Parts
<b>Sector</b>	Automotive
<b>Sub-Sector</b>	Automotive Vehicle Service
<b>Occupation</b>	Technical Service & Repair
<b>NSQF Level</b>	6
<b>Credits</b>	3
<b>Version</b>	1.0
<b>Next Review Date</b>	NA



## ASC/N1463: Data preparation and acquisition for analysis

### Description

This NOS unit is about performing Exploratory Data Analysis on the data extracted, deciding which data attributes are required for analytics and analysing the extracted attributes using excel/ open-source python libraires

### Scope

The scope covers the following :

- Identify business goals for which data need to be analysed
- Prepare the data need to be analysed
- Support in statistical analysis on the selected attributes of data

### Elements and Performance Criteria

#### *Identify business goal for which data need to be analysed*

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

- PC1.** Prepare a list of the business problems within the organization of user/individual
- PC2.** Obtain the business goals which can be achieved using available datasets from the manager
- PC3.** Identify the timeframe of which data is required to address for achieving the business goal

#### *Prepare the data need to be analysed*

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

- PC4.** Create metadata for the selected dataset by following SOP/WI
- PC5.** Clean the data to remove erroneous data from dataset like removing outliers, missing values. etc. by using appropriate tool
- PC6.** Convert and map the data from one raw format into another
- PC7.** Prepare the data in a way that makes it accessible for effective use further down the line

#### *Support in statistical analysis on the selected attributes of data*

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

- PC8.** Perform descriptive statistics like measures of central tendency (mean, median, mode), measures of variability (variance, standard deviation), and frequency distribution on the data under the guidance of manager
- PC9.** Perform inferential statistics like Hypothesis Testing, Regression Analysis. etc. on the data as per the instructions received
- PC10.** Prepare a list of highly correlated attributes and take approval from manager
- PC11.** Find correlation amongst the selected attributes of the data .and plot their heatmap

### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** Product portfolio of organization
- KU2.** Company manufacturing processes

- KU3.** Standard Operation Procedures (SOP) recommended by manufacturer for using equipment / machinery in use
- KU4.** Descriptive and Inferential statistics
- KU5.** Types of data wrangling and data cleaning methods
- KU6.** Suitable documentation of the organization for the metadata creation.
- KU7.** Python open-source libraries like SciPy, Pandas, Matplotlib, SciKit-Learn, etc.
- KU8.** Open-source web application that you can use to create and share documents that contain live code, equations, visualizations, and text like Jupyter Notebook, Jupyter Lab, etc.
- KU9.** Python based platforms like Anaconda

### **Generic Skills (GS)**

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

- GS1.** Communicate effectively at the workplace
- GS2.** Write observations and any work-related information in English/regional language
- GS3.** Recognize a workplace problem and take suitable action
- GS4.** Analyse and apply the information gathered from observation, experience, reasoning or communication to act efficiently
- GS5.** Complete the assigned tasks in a timely and efficient manner
- GS6.** Coordinate with the team for installing the new systems efficiently

## Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Identify business goal for which data need to be analysed</i>	<b>10</b>	<b>10</b>	-	<b>5</b>
<b>PC1.</b> Prepare a list of the business problems within the organization of user/individual	-	-	-	-
<b>PC2.</b> Obtain the business goals which can be achieved using available datasets from the manager	-	-	-	-
<b>PC3.</b> Identify the timeframe of which data is required to address for achieving the business goal	-	-	-	-
<i>Prepare the data need to be analysed</i>	<b>15</b>	<b>15</b>	-	<b>7</b>
<b>PC4.</b> Create metadata for the selected dataset by following SOP/WI	-	-	-	-
<b>PC5.</b> Clean the data to remove erroneous data from dataset like removing outliers, missing values. etc. by using appropriate tool	-	-	-	-
<b>PC6.</b> Convert and map the data from one raw format into another	-	-	-	-
<b>PC7.</b> Prepare the data in a way that makes it accessible for effective use further down the line	-	-	-	-
<i>Support in statistical analysis on the selected attributes of data</i>	<b>15</b>	<b>15</b>	-	<b>8</b>
<b>PC8.</b> Perform descriptive statistics like measures of central tendency (mean, median, mode), measures of variability (variance, standard deviation), and frequency distribution on the data under the guidance of manager	-	-	-	-
<b>PC9.</b> Perform inferential statistics like Hypothesis Testing, Regression Analysis. etc. on the data as per the instructions received	-	-	-	-
<b>PC10.</b> Prepare a list of highly correlated attributes and take approval from manager	-	-	-	-
<b>PC11.</b> Find correlation amongst the selected attributes of the data .and plot their heatmap	-	-	-	-

<b>Assessment Criteria for Outcomes</b>	<b>Theory Marks</b>	<b>Practical Marks</b>	<b>Project Marks</b>	<b>Viva Marks</b>
<b>NOS Total</b>	<b>40</b>	<b>40</b>	<b>-</b>	<b>20</b>

## National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	ASC/N1463
<b>NOS Name</b>	Data preparation and acquisition for analysis
<b>Sector</b>	Automotive
<b>Sub-Sector</b>	Automotive Vehicle Service
<b>Occupation</b>	Technical Service & Repair
<b>NSQF Level</b>	6
<b>Credits</b>	5
<b>Version</b>	1.0
<b>Next Review Date</b>	NA

## ASC/N1464: Dashboarding of the Analysed data

### Description

This NOS unit is about creating different visualizations charts for the important attributes of the analysed data. This is also about selecting and using different tools to create and publish real time interactive dashboards for valuable insights which play important role in decision process making.

### Scope

The scope covers the following :

- Select appropriate charts for different attributes of the dataset
- Create dashboards
- Deployment of dashboards in local server or on the cloud

### Elements and Performance Criteria

#### *Select appropriate charts for different attributes of the dataset*

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

- PC1.** Segregate nominal and ordinal attributes in the dataset
- PC2.** Select appropriate charts for nominal and ordinal variables
- PC3.** Select appropriate visualization chart for time series data

#### *Create dashboards*

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

- PC4.** Integrate geographical map for relevant attributes in dashboards
- PC5.** Create dashboard on a sales and order data having time-stamp attributes using dashboarding tool
- PC6.** Create demand forecasting dashboard on a relevant dataset using dashboarding tool

#### *Deployment of dashboards in local server or on the cloud*

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

- PC7.** Upload the dashboards on the local server or cloud
- PC8.** Verify and validate the compatibility of dashboard on different devices
- PC9.** Create the alert system in real time dashboard as per requirement

### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** Organizational policies, procedures, and guidelines that relate to designing and maintaining networks
- KU2.** Organizational policies and procedures for sharing data
- KU3.** Organizational policies and procedures for documenting network designs and fall-back mechanisms
- KU4.** Different types of visualizations charts Bar Graph, Line Graph, Stacked Bar Graph, Pie Chart, Scatter Plot Chart, etc.

- KU5.** Different types and categories of data variables qualitative, quantitative, nominal, ordinal, discrete, continuous, etc.
- KU6.** Different types of visualizations tools like Microsoft PowerBI Desktop, Tableau Public
- KU7.** Local machine server architecture

### **Generic Skills (GS)**

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

- GS1.** Follow instructions, guidelines, procedures, rules, and service level agreements
- GS2.** Listen effectively and communicate information accurately
- GS3.** Follow rule-based decision-making processes
- GS4.** Make decisions on suitable courses
- GS5.** Plan and organize the work to achieve targets and meet deadlines
- GS6.** Refer anomalies to the supervisor
- GS7.** Ask for clarification and advice from appropriate people
- GS8.** Analyse the business impact and disseminate relevant information to others
- GS9.** Apply balanced judgments to different situations
- GS10.** Check the work is complete and free from errors
- GS10.** Work independently and collaboratively

## Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Select appropriate charts for different attributes of the dataset</i>	<b>10</b>	<b>10</b>	-	<b>5</b>
<b>PC1.</b> Segregate nominal and ordinal attributes in the dataset	-	-	-	-
<b>PC2.</b> Select appropriate charts for nominal and ordinal variables	-	-	-	-
<b>PC3.</b> Select appropriate visualization chart for time series data	-	-	-	-
<i>Create dashboards</i>	<b>15</b>	<b>15</b>	-	<b>7</b>
<b>PC4.</b> Integrate geographical map for relevant attributes in dashboards	-	-	-	-
<b>PC5.</b> Create dashboard on a sales and order data having time-stamp attributes using dashboarding tool	-	-	-	-
<b>PC6.</b> Create demand forecasting dashboard on a relevant dataset using dashboarding tool	-	-	-	-
<i>Deployment of dashboards in local server or on the cloud</i>	<b>15</b>	<b>15</b>	-	<b>8</b>
<b>PC7.</b> Upload the dashboards on the local server or cloud	-	-	-	-
<b>PC8.</b> Verify and validate the compatibility of dashboard on different devices	-	-	-	-
<b>PC9.</b> Create the alert system in real time dashboard as per requirement	-	-	-	-
<b>NOS Total</b>	<b>40</b>	<b>40</b>	-	<b>20</b>



## National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	ASC/N1464
<b>NOS Name</b>	Dashboarding of the Analysed data
<b>Sector</b>	Automotive
<b>Sub-Sector</b>	Automotive Vehicle Service
<b>Occupation</b>	Technical Service & Repair
<b>NSQF Level</b>	6
<b>Credits</b>	5
<b>Version</b>	1.0
<b>Next Review Date</b>	NA

## Assessment Guidelines and Assessment Weightage

### Assessment Guidelines

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down the proportion of marks for Theory and Skills Practical for each PC.
2. The assessment for the theory part will be based on the knowledge bank of questions created by the SSC.
3. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.
4. Individual assessment agencies will create unique question papers for the theory part for each candidate at each examination/training center (as per assessment criteria below).
5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.
6. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.

**Minimum Aggregate Passing % at QP Level : 70**

(**Please note:** Every Trainee should score a minimum aggregate passing percentage as specified above, to successfully clear the Qualification Pack assessment.)

**Assessment Weightage**

Compulsory NOS

<b>National Occupational Standards</b>	<b>Theory Marks</b>	<b>Practical Marks</b>	<b>Project Marks</b>	<b>Viva Marks</b>	<b>Total Marks</b>	<b>Weightage</b>
ASC/N9810.Manage work and resources (Manufacturing)	50	30	-	20	100	15
DGT/VSQ/N0103.Employability Skills (90 Hours)	20	30	-	-	50	15
ASC/N1462.Data Extraction and Collection from Automotive Sales, Service & Spare Parts	40	40	0	20	100	30
ASC/N1463.Data preparation and acquisition for analysis	40	40	0	20	100	20
ASC/N1464.Dashboarding of the Analysed data	40	40	0	20	100	20
<b>Total</b>	<b>190</b>	<b>180</b>	<b>0</b>	<b>80</b>	<b>450</b>	<b>100</b>

## Acronyms

<b>NOS</b>	National Occupational Standard(s)
<b>NSQF</b>	National Skills Qualifications Framework
<b>QP</b>	Qualifications Pack
<b>TVET</b>	Technical and Vocational Education and Training

## Glossary

<b>Sector</b>	Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
<b>Sub-sector</b>	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
<b>Occupation</b>	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
<b>Job role</b>	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
<b>Occupational Standards (OS)</b>	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the Knowledge and Understanding (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
<b>Performance Criteria (PC)</b>	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
<b>National Occupational Standards (NOS)</b>	NOS are occupational standards which apply uniquely in the Indian context.
<b>Qualifications Pack (QP)</b>	QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.
<b>Unit Code</b>	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
<b>Unit Title</b>	Unit title gives a clear overall statement about what the incumbent should be able to do.
<b>Description</b>	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
<b>Scope</b>	Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required.
<b>Knowledge and Understanding (KU)</b>	Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.

<p><b>Organisational Context</b></p>	<p>Organisational context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.</p>
<p><b>Technical Knowledge</b></p>	<p>Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.</p>
<p><b>Core Skills/ Generic Skills (GS)</b></p>	<p>Core skills or Generic Skills (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.</p>
<p><b>Electives</b></p>	<p>Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives.</p>
<p><b>Options</b></p>	<p>Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options.</p>