

LEVEL 5

TITLE: E-COMMERCE DEVELOPMENT

YEAR: 2024

E-COMMERCE DEVELOPMENT

GENERAL INFORMATION

QUALIFICATION PURPOSE

This qualification is to equip learners with skills and knowledge in developing, managing, and optimizing e-commerce platforms using PHP and Content Management System (CMS)

QUALIFICATION OBJECTIVES

The learner should be able to: -

- i. Apply the fundamentals of e-commerce systems
- ii. Master PHP Techniques for E-Commerce Development
- iii. Develop Skills in Content Management Systems (CMS) for E-Commerce
- iv. Manage E-Commerce Databases
- v. Ensure E-Commerce Platforms Meet Security Requirements
- vi. Apply Privacy Rights, User Consent, and Data Handling Practices
- vii. Apply Data-Driven Marketing Strategies
- viii. Build Multi-Channel and Mobile Commerce Platforms

Mandatory Units

Unit No	Reference Number	NOS Title	Credit Value	Guided Learning Hours	Remark
UNIT 01	ICT/ECD/001/L5	Occupational Health and Safety	2	20	LEVEL 5
UNIT 02	ICT/ECD/002/L5	Communication and Interpersonal Skills	2	20	LEVEL 5
UNIT 03	ICT/ECD/003/L5	Team Work	2	20	LEVEL 5
UNIT 04	ICT/ECD/004/L5	Advanced E- Commerce using PHP	4	40	LEVEL 5
UNIT 05	ICT/ECD/005/L5	Advance E- Commerce using Content Management System	4	40	LEVEL 5
UNIT 06	ICT/ECD/006/L5	Database Management	4	40	LEVEL 5
UNIT 07	ICT/ECD/007/L5	E-Commerce Analytics and Data-Driven Marketing	4	40	LEVEL 5
UNIT 08	ICT/ECD/008/L5	E-Commerce Security	3	30	LEVEL 5
UNIT 09	ICT/ECD/009/L5	Data Privacy and User Protection	3	30	LEVEL 5
UNIT 10	ICT/ECD/010/L5	E-Commerce Best Practices	3	30	LEVEL 5
UNIT 11	ICT/ECD/011/L5	Multi-Channel and Mobile Commerce	3	30	LEVEL 5
TOTAL			34	340	

LEVEL 5: E-COMMERCE DEVELOPMENT

Unit 01: OCCUPATIONAL HEALTH AND SAFETY

Unit Reference Number: ICT/ECD/001/L5

NSQ Level: 5

Credit Value: 2

Guided Learning Hours: 20

Unit Purpose: This unit specifies the competencies required to demonstrate understanding of safe work practices, it involves learning about workplace safety correct use of signs and symbols, Identifying and reducing risks of hazards in the work environment

Unit assessment requirements/ evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used include:

- 1. Direct Observation/oral questions (DO)
- 2. Question and Answer (QA)
- 3. Professional Discussion (PD)
- 4. Reflect Journal (RJ

UNIT 01: OCCUPATIONAL HEALTH AND SAFETY

LEARNING OBJECTIVE (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type		ideno f. Pa	
LO 1: Demonstrate Safe working	1.1	Explain safe work practice and instructions in an ICT environment				
Practices and Instructions	1.2	Carry out safe work practices and instructions in an ICT environment				
instructions	1.3	Work in accordance with health and safety best practices in an ICT environment				
	1.4	Follow all necessary instructions related to safety in the work place				
LO 2: Demonstrate	2.1	Identify work environment hazards in an ICT environment				
Understanding of Safety Hazards and	2.2	State various methods to reduce the risk of identified hazards in an ICT environment				
risks	2.3	Demonstrate use of safety equipment applicable to ICT environment.				
LO 3: Possess the	3.1	State how to maintain hygienic, safe and secure workplace.				
ability to take appropriate actions during	3.2	Demonstrate the uses of safety equipment in an ICT environment as required.				
accident/injury	3.3	Identify basic first aid equipment				
	3.4	Illustrate basic first aid treatments				
LO 4: Demonstrate	4.1	Use safe access and exit routes in the work environment				
safe work habit and clean work environment	4.2	Dispose all wastes appropriately to designated waste facilities				

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Unit 02: COMMUNICATION AND INTERPERSONAL SKILLS

Unit Reference Number: ICT/ECD/002/L5

NSQ Level: 5

Credit Value: 2

Guided Learning Hours: 20

Unit Purpose: This unit specifies the competencies required to demonstrate good

communication and interpersonal skills. It involves the ability to read and

understand documented instructions and the ability to know how to communicate

respectfully when in a bad mood or under pressure.

Unit assessment requirements/ evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human

development is carried out.

Assessment methods to be used include:

1. Direct Observation/oral questions (DO)

2. Question and Answer (QA)

3. Professional Discussion (PD)

4. Reflect Journal (RJ)

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UNIT 02: COMMUNICATION AND INTERPERSONAL SKILL

LEARNING OBJECTIVE (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type		ider f. Pa	
LO 1: Know of the	1.1	State reasons why good communication is important				
importance of	1.2	List ways to communicate effectively				
good communication	1.3	Exhibit patience and a mild demeanor while communicating with colleagues, managers and clients				
	1.4	Demonstrate how to speak in a respectful manner				
	1.5	Use respectful body language even when in a bad mood or while under pressure				
LO 2: Demonstrate ability to follow	2.1	Read and accurately follow steps in a web framework/plugins installation manual				
documented instructions	2.2	Find specific Class definitions and Method descriptions in the programming language reference document.				
	2.3	Find feature descriptions in the plugin framework documentation, while using a plugins/framework,				

LEVEL 5: E-COMMERCE DEVELOPMENT

UNIT 03: TEAMWORK

Unit Reference Number: ICT/ECD/003/L5

NSQ Level: 5 Credit Value: 2

Guided Learning Hours: 20

Unit Purpose:

This unit is aims to equip the learner with necessary skills, knowledge and understanding required to develop team spirit and positive working relationship with colleagues.

Unit Assessment requirement

Assessment of this unit must be at a real practical work environment; simulation is not allowed unless where indicated.

Unit assessment requirements/evidence requirements

- 1. Observation
- 2. Work Product
- 3. Professional Discussion
- 4. Question and Answer

Unit 03: Teamwork

LEARNING OBJECTIVE (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type		viden ef. Pa o.	
LO 1	1.1	Identify the need for developing				
Positive working relationship with		positive working relationship with colleagues		П		
colleagues	1.2	Recognize the importance of		П		
		relating with other people in a way				
		that makes them feel valued and respected				
	1.3	Assist team members when required.				
	1.4	Report to the appropriate personnel		П		
		when request for assistance fall				
	1.7	outside area of responsibility.				
	1.5	Communicate information to colleagues about individual work				
		that may affect team work.				
LO 2		Recognize own role and responsibilities within a team				
Take responsibility	2.2	Perform individual tasks in line				
within the team		with the team's rules and regulations.				
	2.3	Participate effectively in				
		teamwork.				
LO.3		Explain organizational code of				
Compliance with		conduct				
policy of organization	3.2	Work in line with organizational standard				
	3.3	Use organizational code of practice				
	3.4	Adhere strictly to instructions				
		given by the Management				

UNIT 04: ADVANCED E-COMMERCE DEVELOPMENT USING PHP

Unit Reference Number: ICT/ECD/004/L5

NSQ Level: 5

Credit Value: 4

Guided Learning Hours: 40

Unit Purpose: This unit aims to equip learners with skills and knowledge in PHP techniques such as building scalable e-commerce platforms, API integration, and advanced security protocols.

Unit assessment requirements/ evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used include:

- 1. Direct Observation/oral questions (DO)
- 2. Question and Answer (QA)
- 3. Witness Testimony (WT)
- 4. Assignment (ASS), etc.

UNIT 04: ADVANCED E-COMMERCE DEVELOPMENT USING PHP

LEARNING OBJECTIVE (LO) The learner will:		PERFORMANCE CRITERIA Evidence Type The learner can:						ence Page	
LO 1:	1.1	Design normalized, scalable database							
Develop complex		schemas to handle large product catalogs.							
database-driven applications using PHP and	1.2	Develop complex queries to manage customer orders, inventory, and payments.							
MySQL	1.3	Integrate relational databases with PHP to facilitate seamless data retrieval.							
	1.4	Implement indexing and caching techniques to improve database performance.							
LO 2: Integrate third-	2.1	Implement payment gateway APIs such as PayPal, Stripe, Paystack, Flutter, etc.							
party APIs for payment	2.2	Integrate shipping services to calculate real-time rates and track orders.							
processing, shipping, and inventory	2.3	Synchronize external inventory management systems with the e-commerce platform.							
management	2.4	Handle API errors and exceptions to ensure reliable data exchange.							
LO 3: Implement advanced	3.1	Use encryption to secure sensitive customer information like payment data.							
security measures to protect e-	3.2	Develop secure login and authentication systems to prevent unauthorized access.							
commerce platforms	3.3	Implement secure session management to prevent session hijacking and XSS attacks.							
	3.4	Apply input sanitization and SQL injection protection to safeguard the platform.							

UNIT 05: ADVANCED E-COMMERCE DEVELOPMENT USING CONTENT MANAGEMENT SYSTEM (CMS)

Unit Reference Number: ICT/ECD/005/L5

NSQ Level: 5

Credit Value: 4

Guided Learning Hours: 40

Unit Purpose: This unit aims to equip learners with skills and knowledge on customizing Content Management System (CMS) and WooCommerce to build highly optimized and scalable e-commerce platforms.

Unit assessment requirements/ evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used include:

- 1. Direct Observation/oral questions (DO)
- 2. Question and Answer (QA)
- 3. Witness Testimony (WT)
- 4. Assignment (ASS), etc.

UNIT 05: ADVANCED E-COMMERCE DEVELOPMENT USING CONTENT MANAGEMENT SYSTEM (CMS)

LEARNING OBJECTIVE (LO) The learner		PERFORMANCE CRITERIA The learner can:	Туре					
will:			 					
LO 1:	1.1	Write custom WooCommerce plugins						
Develop custom		to extend the functionality of online						
Content		stores.						
Management	1.2	Use CMS hooks, filters, and short						
System plugins		codes to modify plugin behaviour.						
for e-commerce	1.3	Ensure compatibility with existing						
functionality		CMS and WooCommerce core						
	1.4	updates.						
	1.4	Test and debug plugins for security,						
102	2.1	performance, and functionality issues.						
LO 2: Customize	2.1	Modify theme files to match brand						
Custoffize		identity and create a consistent user						
Management		interface.						
System themes	2.2	Use responsive design techniques to						
for enhanced e-		ensure compatibility across all devices.						
commerce user	2.3	Integrate custom product display						
experience		features, such as product sliders and						
P	L	grids.						
	2.4	Optimize themes for SEO, fast loading						
103	2.1	times, and usability.						
LO 3:	3.1	Implement caching solutions like WP						
Scale Content		Super Cache and W3 Total Cache to						
Management System e-	3.2	speed up sites Set up Content Delivery Networks						
commerce sites	3.2	(CDNs) to improve performance for						
for high traffic		global users.						
and large	3.3	Optimize MySQL databases for fast						
product catalogs	5.5	data retrieval in high-traffic						
		environments.						
	3.4	Monitor server performance and						
		optimize hosting environments to						
		manage large product volumes.						

UNIT 06: DATABASE MANAGEMENT

Unit Reference Number: ICT/ECD/006/L5

NSQ Level: 5

Credit Value: 4

Guided Learning Hours: 40

Unit Purpose: This unit aims to equip learner with skills and knowledge in designing, managing, and optimizing databases to support e-commerce platforms.

Unit assessment requirements/ evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used include:

- 1. Direct Observation/oral questions (DO)
- 2. Question and Answer (QA)
- 3. Witness Testimony (WT)
- 4. Assignment (ASS), etc.

UNIT 06: DATABASE MANAGEMENT

Design database schemas for e- commerce platforms. 1.2 Design efficient product, customer, and order management systems. 1.3 Implement relational and non- relational databases for scalable solutions. 1.4 Use foreign keys, indexing, and relationships to optimize data access. 1.5 Use database performance for high-traffic e- commerce platforms. 2.1 Implement indexing and query optimization techniques. 2.2 Use database caching to reduce load times. 2.3 Troubleshoot database performance issues. 2.4 Scale databases to handle growth and increased transactions. 1.6 LO 3: Ensure database security and integrity. 3.1 Implement secure data storage methods, including encryption for sensitive data. 3.2 Set up backup and disaster recovery plans. 3.3 Analyze database for security vulnerabilities and unauthorized access. 3.4 Enforce database access controls and audit trails. 1.5 Ensure data from databases to external systems for analytics. 4.1 Export data from databases to external systems for analytics. 4.2 Import data from databases to external systems for analytics. 4.3 Set up real-time data sync with inventory management or order fulfillment systems.	LEARNING OBJECTIVE (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type		dence C. Page
schemas for e- commerce platforms. 1.2 Design efficient product, customer, and order management systems. 1.3 Implement relational and non- relational databases for scalable solutions. 1.4 Use foreign keys, indexing, and relationships to optimize data access. 2.1 Implement indexing and query optimize database performance for high-traffic e- commerce platforms. 2.2 Use database caching to reduce load times. 2.3 Troubleshoot database performance issues. 2.4 Scale databases to handle growth and increased transactions. 3.1 Implement secure data storage methods, including encryption for sensitive data. 3.2 Set up backup and disaster recovery plans. 3.3 Analyze databases for security vulnerabilities and unauthorized access. 3.4 Enforce database access controls and audit trails. 4.1 Export data from databases to external systems for analytics. 4.2 Import data from databases to external systems for analytics. 4.3 Use APIs to connect databases with third-party systems such as CRMs. 4.4 Set up real-time data sync with inventory management or order fulfillment systems.		1.1				
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systems.		7.5				

UNIT 07: E-COMMERCE ANALYTICS AND DATA-DRIVEN MARKETING

Unit Reference Number: ICT/ECD/007/L5

NSQ Level: 5

Credit Value: 4

Guided Learning Hours: 40

Unit Purpose: This unit aims to equip learners with skills and knowledge to use data to drive marketing strategies and enhance customer engagement, using tools like Google Analytics to optimize website performance.

Unit assessment requirements/ evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used include:

- 1. Direct Observation/oral questions (DO)
- 2. Question and Answer (QA)
- 3. Witness Testimony (WT)
- 4. Assignment (ASS), etc.

UNIT 07: E-COMMERCE ANALYTICS AND DATA-DRIVEN MARKETING

LEARNING OBJECTIVE (LO) The learner will:		The learner can:			Evidence Type					enc Pag	_
LO 1: Analyze e- commerce data	1.1	Collect and organize data from various sources (e.g., Google Analytics, CRM systems) to understand key user									
to understand		interactions									
consumer behaviour	1.2	Perform customer segmentation based on purchasing history, demographics, and website behaviour									
	1.3	Use data visualization tools to identify patterns and trends in consumer purchasing behaviour.									
	1.4	Analyse bounce rates, cart abandonment rates, and time spent on product pages to understand customer decision-making.									
LO 2: Optimize conversion rates	2.1	Identify bottlenecks in the checkout process by analyzing funnel drop-off points									
based on data insights.	2.2	A/B test different versions of landing pages, product pages, and calls-to-action (CTAs) to improve user engagement									
	2.3	Implement dynamic pricing strategies or personalized recommendations based on data insights									
	2.4	Monitor key performance indicators (KPIs) such as conversion rate, average order value, and customer lifetime value to measure optimization efforts									
LO 3: Implement data- driven	3.1	Analyse customer data to create targeted email marketing campaigns for specific consumer segments									
marketing campaigns for e-commerce growth.	3.2	Use website traffic and purchase history data to implement retargeting campaigns via Google Ads, Facebook, and other platforms									
	3.3	Create personalized marketing content (e.g., product recommendations) based on customer browsing and purchase data.									

LEARNING OBJECTIVE (LO)		PERFORMANCE CRITERIA	Ev Ty	enc	ee		vid ef.] o.	
		The learner can:						
The learner								
will:								
	3.4	Monitor the performance of marketing						
		campaigns in real-time and adjust						
		strategies based on data-driven insights						
		to improve ROI.						

UNIT 08: E-COMMERCE SECURITY

Unit Reference Number: ICT/ECD/008/L5

NSQ Level: 5

Credit Value: 3

Guided Learning Hours: 30

Unit Purpose: This unit aims to equip learners with skills and knowledge on how to protect e-commerce platforms from cyber threats by implementing strong security measures.

Unit assessment requirements/ evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used include:

- 1. Direct Observation/oral questions (DO)
- 2. Question and Answer (QA)
- 3. Witness Testimony (WT)
- 4. Assignment (ASS), etc.

UNIT 08: E-COMMERCE SECURITY

LEARNING OBJECTIVE (LO)		PERFORMANCE CRITERIA		vide ype	nce	e		ef.	nce Pa	
The learner		The learner can:								
will:										
LO 1:	1.1	Apply SSL/TLS certificates to secure								
Implement Encryption and		communications between the server and client.								
Secure Secure	1.2	Use encryption standards like AES and								
Communication		RSA to protect sensitive data at rest								
Protocols		and during transmission.								
	1.3	Implement HTTPS protocols across all								
		e-commerce site pages, ensuring secure data exchanges.								
	1.4	Regularly update encryption protocols								
	1	to mitigate vulnerabilities.								
LO 2:	2.1	Apply input validation and sanitization								
Protect Against		to prevent SQL injection attacks.								
Common Web Vulnerabilities	2.2	Use secure coding practices to mitigate								
(SQL Injection,		cross-site scripting (XSS) and cross-								
XSS, etc.)		site request forgery (CSRF) vulnerabilities.								
	2.3	Conduct regular security audits and								
		penetration testing to identify and fix								
		vulnerabilities.								
	2.4	Monitor website activity logs for signs								
		of attacks and implement real-time alerts.								
LO 3:	3.1	Set up multi-factor authentication								
Implement User		(MFA) for user logins, especially for								
Authentication		admin accounts.								
and Access Controls	3.2	Use role-based access controls (RBAC) to limit permissions to sensitive areas of								
Controls		the platform.								
	3.3	Encrypt passwords using hashing								
		algorithms like bcrypt or Argon2 before								
	2.4	storing them in the database.								
	3.4	Implement secure password recovery systems that prevent unauthorized								
		account access.								
LO 4:	4.1	Use real-time monitoring tools like								
Monitor system		Intrusion Detection Systems (IDS) to								
against Security		detect unauthorized access.								
Threats		Implement automated alerts to notify the security team of suspicious								
		activities on the platform.								
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LEARNING OBJECTIVE (LO) The learner will:	PERFORMANCE CRITERIA The learner can:	Evidence Type	Evidence Ref. Page No.
	Set up firewalls to block unauthorized traffic and mitigate Distributed Denial-of-Service (DDoS) attacks. Develop an incident response plan to effectively address and mitigate data breaches or cyber-attacks.		

UNIT 09: DATA PRIVACY AND USER PROTECTION

Unit Reference Number: ICT/ECD/009/L5

NSQ Level: 5

Credit Value: 3

Guided Learning Hours: 30

Unit Purpose: This unit aims to equip learners with the skills required to protect user data in e-commerce platforms, ensuring compliance with data privacy regulations such as GDPR, CCPA, and other global standards.

Unit assessment requirements/ evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used include:

- 1. Direct Observation/oral questions (DO)
- 2. Question and Answer (QA)
- 3. Witness Testimony (WT)
- 4. Assignment (ASS), etc.

UNIT 09: DATA PRIVACY AND USER PROTECTION

LEARNING OBJECTIVE		PERFORMANCE CRITERIA		vide vpe	nce	e		nce Pa	
(LO)			1 3	pc			No	1 aş	5 C
Th. 1		The learner can:							
The learner will:									
LO 1:	1.1	Identify key regulations and							
Understand		requirements of GDPR, CCPA, and							
Data Privacy		other relevant data protection laws.							
Regulations	1.2	Implement data processing activities							
(GDPR, CCPA,		that ensure compliance with the							
etc.)		consent, right to access, and data							
	1.3	deletion requests.							
	1.3	Maintain an updated data protection policy that clearly outlines how							
		customer data is collected, processed,							
		and protected.							
	1.4	Conduct data protection impact							\dashv
		assessments (DPIAs) to ensure data							
		processing activities align with legal							
		requirements and do not infringe on							
		user privacy.							
LO 2:	2.1	Use encryption methods (e.g., AES,							
Implement		RSA) to securely store sensitive user							
Secure Data		data such as payment information,							
Storage and Management		addresses, and personal identifiers.							
Techniques	2.2	Implement secure access controls,							
Teeminques		ensuring only authorized personnel							
		have access to customer data.							
	2.3	Regularly audit and monitor database							
		logs to detect and prevent unauthorized							
	2.4	access or data breaches. Develop secure data backup and							
	2.4	disaster recovery plans to protect data							
		integrity in case of hardware or							
		software failures.							
LO 3:	3.1	Use Secure Sockets Layer (SSL)							
Ensure Data		certificates to encrypt data during							
Security during		transmission between customers and							
Transactions		the e-commerce platform.							
	3.2	Implement tokenization for payment							
		card data, replacing sensitive							
		information with unique tokens that can be securely stored.							
	3.3	Regularly update security protocols,							
		such as Transport Layer Security							
		(TLS), to protect against man-in-the-							
		middle attacks and data interception.							

LEARNING OBJECTIVE (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type			Evide Ref. No.		ence Page	
	3.4	Conduct regular penetration testing to identify vulnerabilities in transaction security and fix potential risks.							
LO 4: Create User- Friendly Data Privacy		Develop a user-friendly privacy dashboard where customers can manage their data consent preferences and access their data.							
Controls		Provide clear and transparent information about data collection, use, and storage, making it easy for customers to understand their rights.							
		Implement easy-to-use mechanisms for customers to request data deletion, data correction, or download their personal information.							
		Track and record customer consent for data processing activities, ensuring compliance with legal obligations and facilitating accountability.							

UNIT 10: E-COMMERCE BEST PRACTICES

Unit Reference Number: ICT/ECD/010/L5

NSQ Level: 5

Credit Value: 3

Guided Learning Hours: 30

Unit Purpose: This unit aims to equip leaners with skills and knowledge on ensuring that e-commerce platforms comply with various legal regulations and industry standards.

Unit assessment requirements/ evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used include:

- 1. Direct Observation/oral questions (DO)
- 2. Question and Answer (QA)
- 3. Witness Testimony (WT)
- 4. Assignment (ASS), etc.

UNIT 10: E-COMMERCE BEST PRACTICES

LEARNING OBJECTIVE (LO) The learner		PERFORMANCE CRITERIA The learner can:	Evidence Type		Re	Evidence Ref. Page No.			
will:									
LO 1: Ensure Compliance with GDPR,	1.1	Implement clear user consent mechanisms for data collection, processing, and sharing in compliance with GDPR and CCPA.							
CCPA, and Other Data Privacy	1.2	Develop privacy policies that are compliant with regional and international data privacy laws.							
Regulations	1.3	Ensure that users have the ability to access, modify, and delete their personal data as per regulatory requirements.							
	1.4	Regularly audit data handling processes to ensure ongoing compliance with legal requirements.							
LO 2: Ensure Compliance with Payment	2.1	Use PCI-compliant payment gateways and tokenization methods to secure credit card transactions.							
Industry Standards (PCI DSS)	2.2	Implement encryption for all cardholder data to ensure secure transactions.							
	2.3	Conduct regular vulnerability scans and penetration tests to maintain PCI DSS compliance.							
	2.4	Ensure that sensitive data such as card numbers are not stored unless absolutely necessary and, if stored, are encrypted.							
LO 3: Ensure Compliance	3.1	Implement VAT, sales tax, and other legal requirements based on the region of operation.							
with Regional E-Commerce Regulations	3.2	Ensure compliance with export control laws when conducting cross-border ecommerce transactions.							
	3.3	Adhere to region-specific consumer protection laws, ensuring transparent product descriptions and terms of service.							
	3.4	Regularly review and update terms and conditions, refund policies, and dispute resolution mechanisms to ensure they meet regional legal standards.							

LEARNING OBJECTIVE (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type		Re	Evidence Ref. Pa No.			
LO 4: Maintain Accurate	4.1	Keep detailed logs of all transactions, including payment processing, user interactions, and order fulfilment.							
Records and Documentation for Compliance	4.2	Maintain proper documentation of all security measures and compliance activities for audits.							
Audits	4.3	Ensure that data protection impact assessments (DPIAs) are regularly updated and archived.							
	4.4	Implement version control for legal documents, contracts, and terms of service to track changes and ensure auditability.							

UNIT 11: MULTI-CHANNEL AND MOBILE COMMERCE

Unit Reference Number: ICT/ECD/011/L5

NSQ Level: 4

Credit Value: 3

Guided Learning Hours: 30

Unit Purpose: This unit aims to equip learners with skills and knowledge on selling products across multiple channels (social media, mobile apps, and marketplaces) and optimizing mobile commerce.

Unit assessment requirements/ evidence requirements:

Assessment must be carried out in real workplace environment in which learning and human development is carried out.

Assessment methods to be used include:

- 1. Direct Observation/oral questions (DO)
- 2. Question and Answer (QA)
- 3. Witness Testimony (WT)
- 4. Assignment (ASS), etc.

UNIT 11: MULTI-CHANNEL AND MOBILE COMMERCE

LEARNING OBJECTIVE (LO) The learner will:		PERFORMANCE CRITERIA The learner can:	Evidence Type		Evide Ref. No.			
LO 1: Implement a	1.1	Identify suitable sales channels for a business based on target audience and						
multi-channel e-		product type.						
commerce strategy	1.2	Develop an e-commerce strategy for multiple platforms, including websites, marketplaces, and social media.						
	1.3	Configure platform-specific tools such as product listings, payment options, and shipping settings.						
	1.4	Evaluate the performance of sales channels using analytics to improve sales and engagement.						
LO 2: Develop user- centric designs	2.1	Create mobile-friendly layouts that ensure seamless user experiences across devices.						
for mobile e- commerce platforms	2.2	Optimize e-commerce features, including search, navigation, and checkout, for mobile users.						
	2.3	Implement mobile-specific functionalities like push notifications and mobile payments.						
	2.4	Conduct usability testing to identify issues that hinder mobile user satisfaction.						
LO 3: Integrate and manage inventory and	3.1	Implement an inventory management system to synchronize stock levels across all sales channels.						
customer data across multiple sales channels	3.2	Set up a centralized system to track and manage customer data across platforms.						
	3.3	Automate workflows to update order statuses and manage returns from various channels.						
	3.4	Ensure compliance with regulations when managing customer and inventory data.						

PARTICIPANT FOR CRITIQUE WORKSHOP

S/N	Full Name	Organization	Address	Email	Telephone
1	OBIAHU, Okechukwu Othniel	Oando Energy Resources Nigeria Ltd.	No 43 NDDC Road 11, Rumukwurusi Pipeline, Rivers State	othnielobiahu@yahoo.com	08038869114
2	FASINA, Felicia ltse	NBTE	Plot B Bida Road, NBTE, Kaduna	feliciasina@gmail.com	08036570850
3	ABDULLAHI, Lawal	KAD ICT HUB	No 47 Kanta Road Off Independence Way, Kaduna State	ocplawal@gmail.com	08035169089
4	YOUNG- HARRY, Constance Soye	Ministry of Education Rivers State	Road 12, House 14 Trans Amadi Gardens Port Harcourt, Rivers State	constanceyoungharry@gmail .com	08032684914
5	MUHAMMAD, BILYAMINU MUSA	NBTE	PLOT B, Bida Road, Kaduna	mahogany@gmail.com	09036071291
6	Muhammad Bello Aliyu	CPN	1321 Adesoji Aderemi Street, Gudu District, Apo Abuja FCT	mbacaspet@gmail.com	08039176984
7	BENJAMIN, Prince Chukwudindu	CPN	1321 Adesoji Aderemi Street, Gudu District, Apo Abuja FCT	Pco.benjamin@gmail.com	08132850544
8	Amoo, Taofeek	CPN	1321 Adesoji Aderemi Street, Gudu District, Apo Abuja FCT	taofeekamoo@gmail.com	08053370334
9	Olatunji Abibat	CPN	1321 Adesoji Aderemi Street, Gudu District, Apo Abuja FCT	adehabb@gmail.com	08054263602

ECT	10	Linda Ngbeken	CPN	1321 Adesoji Aderemi Street, Gudu District, Apo Abuja	excel4all2000@yahoo.com	08128219274
				FCT		

PARTICIPANT FOR VALIDATION WORKSHOP

S/ N	Full Name	Organization	Address	Email	Telephone
1	OBIAHU, Okechukwu Othniel	Oando Energy Resources Nigeria Ltd.	No 43 NDDC Road 11, Rumukwurusi Pipeline, Rivers State	othnielobiahu@yahoo.com	08038869114
3	ABDULLAH I, Lawal	KAD ICT HUB	No 47 Kanta Road Off Independence Way, Kaduna State	ocplawal@gmail.com	08035169089
4	YOUNG- HARRY, Constance Soye	Ministry of Education Rivers State	Road 12, House 14 Trans Amadi Gardens Port Harcourt, Rivers State	constanceyoungharry@gm ail.com	08032684914
5	Dr. Musa Hatim Koko	NBTE	PLOT B, Bida Road, Kaduna	hatimlion@gmail.com	08039606948
6	MUHAMMA D, BILYAMINU MUSA	NBTE	PLOT B, Bida Road, Kaduna	mahogany@gmail.com	09036071291
7	Muhammad Bello Aliyu	CPN	1321 Adesoji Aderemi Street, Gudu District, Apo Abuja FCT	mbacaspet@gmail.com	08039176984
8	BENJAMIN, Prince Chukwudindu	CPN	1321 Adesoji Aderemi Street, Gudu District, Apo Abuja FCT	Pco.benjamin@gmail.com	08132850544