**GHANA** **COMMUNICATION TECHNOLOGY UNIVERSITY(GCTU)**

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**FACULTY OF COMPUTING AND INFORMATION SYSTEM**

**INFORMATION TECHNOLOGY PROJECT WORK MANAGEMENT**

**IT 413**

**COURSE INSTRUCTOR: DR. OHENE-BONSU SIMMONS**

**CLASS: BIT LEVEL 400 EVENING**

**GROUP ASSIGNMENT**

**QUESTION ONE**

Electricity Company of Ghana (ECG) is a state-owned electricity utility company responsible for distributing electricity in Ghana. ECG has been facing challenges in managing their database, leading to inefficiencies in their operations and customer service.

Project Objective: Implement Oracle Cloud Database to modernize ECG's database management system and improve operational efficiency.

**Challenges and Risks:**

1. Failure to meet organizational and users' needs: If the new system does not address the specific pain points and requirements of ECG's staff and customers, it may lead to decreased adoption and ultimately, project failure.
2. Change in leadership and policies: If there is a change in leadership or policies at ECG during the project implementation, it may affect the project's direction, funding, or prioritization, leading to project failure.
3. Inexperienced project managers: If the project managers leading the Oracle Cloud Database implementation lack experience in managing similar projects, it may lead to poor decision-making, delays, and project failure.
4. Unclear goals and objectives: If the goals and objectives of the Oracle Cloud Database project are not clearly defined or communicated to all stakeholders, it may lead to confusion, scope creep, and project failure.

**QUESTION THREE**

**Effective communication is the foundation of any successful project** - As a project manager, it is essential to ensure that all stakeholders, including team members, vendors, and clients, are informed and aligned with the project's goals, timelines, and progress. This requires developing a comprehensive communication plan that outlines the communication channels, frequency, and protocols. By doing so, project managers can ensure that everyone is on the same page, and any issues or concerns are addressed promptly.

**Strong leadership is critical to guiding the project team towards achieving the project's objectives** - Project managers must possess the ability to motivate and inspire their team members to perform at their best. This involves providing clear direction, setting realistic goals, and empowering team members to take ownership of their work. By demonstrating strong leadership, project managers can build trust and confidence with their team, which is essential for overcoming obstacles and achieving project success.

**Empathy is a vital skill for project managers to possess** - Understanding and acknowledging the concerns, perspectives, and emotions of team members is crucial for building strong relationships and fostering a collaborative team environment. By actively listening and showing appreciation for team members' contributions, project managers can create a positive and inclusive team culture. This, in turn, can lead to increased productivity, creativity, and job satisfaction.

**Network management skills are essential for project managers to deliver projects efficiently and effectively** - This involves identifying and assessing project risks, developing and implementing risk mitigation strategies, managing project budgets and resources, and ensuring quality assurance and control. By possessing strong network management skills, project managers can navigate complex project landscapes, optimize resources, and ensure that projects are delivered on time, within budget, and to the required quality standards.

**QUESTION TWO**

**Proposed IT Project:**  
**Oracle Cloud Database Implementation**  
This project involves migrating ECG's database infrastructure to Oracle Cloud, offering advanced data management capabilities, enhanced security, scalability, and real-time analytics.

**Key Features:**

* **Data Scalability:** Supports large datasets with high-speed processing.
* **Real-Time Analytics:** Provides instant insights into customer usage patterns and operational metrics.
* **Enhanced Security:** Leverages Oracle’s advanced encryption and monitoring tools to safeguard customer data.
* **Cost-Effectiveness:** Reduces maintenance costs through cloud-hosted solutions.

**QUESTION THREE**

**IT Project Business Case for Sponsor Consideration and Approval:**  
**Objective:**  
To transform ECG’s data management processes by implementing Oracle Cloud Database, improving operational efficiency, customer satisfaction, and data security.

**Benefits:**

* **Operational Efficiency:** Streamlined data handling will reduce billing errors and improve service delivery.
* **Improved Customer Experience:** Real-time analytics will enhance customer engagement through faster issue resolution and accurate billing.
* **Enhanced Security:** Modernized security protocols will protect sensitive data from breaches.
* **Cost Savings:** Transitioning to the cloud eliminates expensive hardware maintenance.

**Estimated Costs and Timeline:**

* **Cost:** $X million (to be refined after a feasibility study).

**Timeline:** 6–12 months from approval to full implementation

**Key Stakeholders:**

* ECG Management
* IT Department
* Oracle Implementation Partners

Regulatory Authorities.

**QUESTION FOUR**1. **Enhanced Security** - Registration helps prevent unauthorized access to mobile networks.

2. **Improved User Experience** - Registration enables personalized services and account recovery.

3. **Transparency** - Registration promotes transparency and accountability in mobile services.

4. **Data Integrity** - Registration ensures accurate user data for network management.

**QUESTION FIVE**  
 **Deliverable 1: Database Design and Configuration Document**

* A detailed document outlining the proposed database design, architecture and configuration.
* Includes entity-relationship diagrams, data models, and database schema.
* Specifies the Oracle Cloud Database services to be used (e.g., Autonomous Database, Exadata Cloud Service).
* Outlines the security, backup, and recovery configurations.

**Deliverable 2: Proof of Concept (PoC) Report**

* A report detailing the results of a PoC implementation of the proposed Oracle Cloud Database - ECG project.
* Demonstrates the feasibility of integrating the ECG application with the Oracle Cloud Database.
* Includes performance metrics, scalability testing results, and any identified technical limitations.
* Provides recommendations for addressing any technical challenges or limitations identified during the PoC.

**QUESTION SIX**

**Likely Deliverables Before Final Implementation:**

* **System Requirements Specification (SRS):** A detailed document outlining functional and technical requirements for Oracle Cloud.
* **Prototype/Proof of Concept (PoC):** A working model showcasing data migration and key functionalities on Oracle Cloud to validate the solution.

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