



PAPUA NEW GUINEA PUBLIC SERVICE

JOB DESCRIPTION

1.0 IDENTIFICATION

AGENCY: Department of Information and Communication Technology	SYS. POSN. NO: 0580000090	REF. NO: ICDT.87
WING: Digital Government & Information Delivery	DESIGNATION/CLASSIFICATION: Senior Digital Govt Database Developer- Grade 14	
DIVISION: Digital Government and Shared Services	LOCAL DESIGNATION: Senior Digital Govt Database Developer	
BRANCH: Shared Services	REPORTING TO: Manager - MC & GW	SYS. POS. NO: REF. NO: ICIO.46
SECTION:	LOCATION: Town	

HISTORY OF POSITION

FILE REF.	DATE OF VARIATION	DETAILS
Org:	01/08/20	Variation following restructure of Department

2.0 PURPOSE

The Senior Website Developer is responsible for designing and building Government Website Portal, managing vetted contents and producing website development documentations. Maintaining knowledge of programming languages and monitors website analytics.

3.0 DIMENSIONS

Financial: Annual Budget	Total Staff Supervised: ... Direct: 1 Indirect: Staff on Strength	Other Resources: Capital assets under the ID&OG Wing.
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4.0 PRINCIPAL ACCOUNTABILITIES

- 4.1 Provide timely advice and reports to the Manager for the Shared Services on Database Integrations and Data Analysis of Government Data.
- 4.2 Ensure that Data are sanitized and secured on the Cloud Infrastructure
- 4.3 Ensure delivery Data Analysis reports to the Senior Management.
- 4.4 Provide guidelines and standards for Government Databases and Integration requirements.

4.5 Provide effective support to the Manager Shared Services.

5.0 MAJOR DUTIES

- 5.1 Provide regular reports on the design and development of a centralised Government Shared Database.
- 5.2 Define Central Database objectives by analysing departments and agencies requirements; envisioning system features and functionality.
- 5.3 Design and develop Government Data Model and structure to achieve data exchange securely and accessibility.
- 5.4 Recommend database system solutions by comparing advantages and disadvantages custom developments and purchase alternatives.
- 5.5 Co-Support Government Web Portal Development by coordinating schedules, and activities: contributing to team meetings; troubleshooting development and production problems across multiple environments and operating platforms.
- 5.6 Coordinate with Manager Government Website and Media content to develop integration plans for data exchange and integration of shared services onto the Government Portal.
- 5.7 Collaborate with government departments, agencies, development partners, business and other stakeholders in defining data requirements.
- 5.8 Provide support to the Senior Web Developer and Website Designer, by advising, training and skills transfer to ensure up to date effective human resource.
- 5.9 Facilitate training and development of Divisional staff to ensure that staff have the necessary knowledge and skills to perform the roles and responsibilities in partnership with the Human Resource Branch.
- 5.10 Provide effective support to the Deputy Secretary and perform other duties as required.

6.0 NATURE AND SCOPE

The Senior Database Developer is a member of the Department and contributes to;

- Ensuring that management decisions are implemented
- Support dialogue with external stakeholders such as bilateral and multilateral partners development partners in securing technical assistance and aid funding for major media content development projects and programs
- Contributes to the preparation of the Department's annual budget, NEC Submissions and planning of special projects
- Contributing to dialogue through inter- government agency forums on major government policies including information dissemination initiatives.
- Build partnership with business, and SMEs to promote digital services in urban and rural areas.
- Promoting and maintaining the Public Service Code of Ethics and Conduct
- Maintain a safe and conducive work environment inclusive of the COVID-19 (Niupela Pasin) Policy.

6.1 WORKING RELATIONSHIP

a) Internal

- Consult with Deputy Secretary (Policy & Planning) on internal policy and administrative matters
- Consult with Deputy Secretary (Information and Open Government) on policy related matters.
- Consult with the CTO on policy and technical issues.
- Consult with other Executive Managers on policy and management issues
- Consult with Branch Managers on policy and management matters

b) External

- Consult with NICTA and other regulatory authorities on ICT matters
- Consult with Finance, Treasury and National Planning & Monitoring on policy matters
- Consult bilateral and multilateral development partners
- Consult government departments, agencies and provincial administrations
- Consult business and citizens on ICT matters.

6.2 Work Environment

- Consult with Deputy Secretary (Policy & Planning) on internal policy and administrative matters
- Consult with Deputy Secretary (Information and Open Government) on policy related matters.
- Consult with the CTO on policy and technical issues.
- Consult with other Executive Managers on policy and management issues
- Consult with Branch Managers on policy and management matters

7.0 CONSTRAINTS FRAMEWORK AND BOUNDARIES

7.1 Rules/Procedures

The Executive Manager is guided by the;

- Mandate, internal management and operational policies of the Department,
- Annual recurrent budget of the Department.
- ICT Legislations, ICT Policies and other relevant government priority development policies
- Public sector reforms,
- Public Service Code of Ethics and Conduct.

7.2 Decision

- Corporate priorities, goals and objectives.
- Management, operational policies and procedures.
- Strategic review and change management.
- Conflict management and resolution.
- Commitment and expenditure of funds consistent Public Finance (Management) Act.

7.3 Recommendation

- Policy development and review,
- Strategic and operational plans,

- Reforms and change,
- Work ethics and practices,
- Staff capacity building
- Internal business systems and processes

8.0 CHALLENGES

- Work culture, values and ethics.
- Negative work practices and behavior.
- Lack of staff capacity and resources.
- Lack of team work and participation.

9.0 QUALIFICATIONS, EXPERIENCES AND SKILLS

Qualifications

- Bachelor's Degree Computer Science or Information Technology
- 7+ years of experience
- Fully developed programming skills
- Experience building user interfaces and databases
- Strong troubleshooting and problem-solving skills

Knowledge

- Possess sound knowledge of the databases and data analysis in the government sector and private sector.
- Possess knowledge of research and analysis, programming and application development.
- Sound knowledge of data security best practice
- Conversant with PNG Digital Transformation Policy and related digital legislations, other ICT laws and regulations.
- Familiar with the Vision 2050, MTDP III and other Government policies including the 2018 post APEC Digital Commitments.
- Conversant with other relevant laws and regulations including Public Finance (Management) Act, IFMS, Public Service (Management) Act and PS General Orders, relevant PNG.
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Skills

Senior Database developers rely heavily on their communication skills to succeed. They need actively listen to understand what clients want and make it a reality. They also need excellent collaboration skills to work with designers and other developers as they work towards creating a finished website. Senior database developers need to be experts in databases types, Microsoft SQL, Oracle, MySQL, Mongo etc. Both Relational and non-relational database.

- Listening actively to clients to conceptualize their data exchange requirements.
- Brainstorming shared services data for Portal with other developers using wireframing tools

- Designing and developing database structures with data model diagrams
- Collaborating with other developers to create Government Portal
- Testing all web applications for functionality and providing feedback on the work of junior developers

Work Experience

Must possess at least 7 years of relevant database analysis and development, web applications development and programming experience, and implementing diverse functions in the use of a variety of web platforms in a major government agency or the private sector.