



## IDENTIFICATION

Department	Position Title	
Finance	Business Intelligence and Analytics Developer	
Position Number	Community	Division/Region
15-14936	Yellowknife	Information Systems Shared Services

## PURPOSE OF THE POSITION

The Business Intelligence (BI) and Analytics Developer designs, develops, and deploys business intelligence and data analytics solutions and integrations to support operational and strategic planning, decision-making, and reporting requirements for GNWT departments. This work enables effective integration of data and information across government programs.

## SCOPE

Located in Yellowknife and reporting to the Manager, Data and Analytics, within the Information Systems Shared Services team, the BI and Analytics Developer plans and undertakes BI and analytics software development projects and assignments including the design and development of the end user layer, metadata layer, data warehouse layer, and data Extract, Transform, and Load (ETL) layer. The incumbent must develop solutions that meet the provided business requirements, be compatible with agreed system architectures, adhere to corporate standards, and fit within the constraints of performance and feasibility.

The incumbent is an expert on software development, ensuring the planning, design, creation, verification, testing, and documentation of new and amended software components deliver agreed value to stakeholders. The position assists in the identification, creation and application of agreed software development and security standards and processes. The position adopts and adapts software development lifecycle models based on the context of the work and selects appropriately from predictive (plan-driven) or adaptive (iterative/agile) approaches.

The incumbent supports program areas across the government, through the analysis of quantitative and qualitative data using preferred BI solutions. Their work enhances the efficiency, automation, and accuracy of existing dashboards, visualizations, and reports. They



identify and translate BI and analytics concepts into designs which form the basis for systems construction and verification.

Services are delivered to GNWT departments and the NWT Housing Corporation.

The incumbent works under general direction, uses discretion in identifying and responding to complex issues and assignments, receives specific direction, accepts guidance, and has work reviewed at agreed milestones. They determine when issues should be escalated to a higher level.

The incumbent interacts with and influences colleagues, has working level contact with clients, suppliers, and partners, may make decisions which impact the work assigned to individuals or phases of projects including the work of staff in other departments, understands and collaborates on the analysis of user/client needs and represents this in their work.

The incumbent performs a range of work, often complex and non-routine, in a variety of environments and applies a methodical approach to issue definition and resolution.

## **RESPONSIBILITIES**

### **1. Applies a variety of visualisation techniques and designs the content and appearance of data visuals.**

- Collects and interprets user requirements to develop dashboards, cubes, analysis charts, reports, data extracts, etc. to provide speed-to-data insights.
- Formats and communicates results, using textual, numeric, graphical, and other visualisation methods appropriate to the target audience.
- Follows best practices in data querying and manipulation to ensure data integrity.
- Selects the appropriate visualisation approach from a range of applicable options.
- Contributes to the exploration of new approaches for data visualisation.

### **2. Takes technical responsibility across all stages and iterations of software development for Business Intelligence and Analytics solutions.**

- Plans and drives software construction activities.
- Adopts and adapts appropriate software development methods, tools and techniques selecting appropriately from predictive (plan-driven) or adaptive (iterative/agile) approaches.
- Measures and monitors applications of project/team standards for software construction including software security.
- Contributes to the development of organisational policies, standards, and guidelines for software development.



- Participates in peer reviews of own work and that of colleagues.

**3. Creation of test cases using own in-depth technical analysis of both functional and non-functional specifications (such as reliability, efficiency, usability, maintainability, and portability).**

- Produces test scripts, materials, and regression test packs to test new and amended software or services.
- Works within defined architecture to implement requirements for environment, data, resources, and tools.
- Interprets, executes, and documents complex test scripts using agreed methods and standards.
- Records and analyses actions and results and maintains a defect register.
- Reviews test results and modifies tests if necessary.
- Provides reports on progress, anomalies, risks, and issues associated with the overall project.
- Reports on system quality and collects metrics on test cases.
- Provides specialist advice to support others.
- Coordinates and manages planning of the system and/or acceptance tests, including software security testing, within a development or integration project or initiative.

**4. Assists with release management activities associated with complex system or solution implementations, upgrades, and enhancements.**

- Works with the *Business Intelligence and Analytics Specialist* to assess and analyse release components for BI and analytics solutions.
- Carries out routine BI and analytics builds and tests in coordination with testers, business analysts, project managers, and other stakeholders.
- Ensures appropriate documentation and configuration records are developed and maintained consistent with the organization's practices.
- Ensures release processes and procedures are applied.
- Carries out early life support activities such as providing support advice to initial users.

**WORKING CONDITIONS**

**Physical Demands**

Typical office setting.

**Environmental Conditions**

No unusual environmental conditions.



## **Sensory Demands**

No unusual sensory demands.

## **Mental Demands**

This position undertakes work on which there are client expectations for quality and timely completion of activities with a particular emphasis on designing and delivering complex solutions to meet the needs of a variety of stakeholders with different priorities and views.

The BI and Analytics Developer will be under pressure to respond to a very high demand for improvements in the GNWT's overall BI and Analytics capability and will need to effectively prioritize and communicate with clients, partners, and colleagues. Overtime will be required occasionally to implement changes and meet scheduled timeframes and milestones.

## **KNOWLEDGE, SKILLS AND ABILITIES**

- Knowledge of Business Intelligence and Analytics technology platforms, methods, and practices.
- Knowledge of data warehouse design principles and practices.
- Subject matter expert in all aspects relating to data collection and analysis for internal customers. Effectively communicates information to technical and non-technical audiences.
- Knowledge of database software platforms including relational database management platforms, business intelligence and analytics as well as their tuning and optimization.
- Knowledge of software development methods, practices, and processes.
- Knowledge of the software development lifecycle, as well as the various methodologies including predictive (plan-driven) or adaptive (iterative/agile) approaches.
- Awareness of Project Management practices such as those described in the Project Management Body of Knowledge (PMBOK).
- Familiarity with IT service management concepts such as those described in the IT Infrastructure Library (ITIL), Control Objects for IT (CoBIT), Dev/Ops and Lean IT, particularly related to Incident Management and demand management.
- Awareness of Business Analysis practices such as those defined by the International Institute of Business Analysis (IIBA) Business Analysis Body of Knowledge (BABOK Guide).
- Experience with ITSM tools including incident management, problem management, and configuration management tools.
- Ability to maintain an awareness of developments in the industry and select appropriately from applicable standards, methods, tools, and applications, taking responsibility for driving own development.
- Ability to implement software design and programming concepts, processes, and methodologies.
- Communicates fluently, orally and in writing, and can present complex information to both technical and non-technical audiences.



- Has sound generic, domain, and specialist knowledge necessary to perform effectively in the organization typically gained from recognized bodies of knowledge and organizational information.
- Has an appreciation of the wider business context.
- Takes action to develop own knowledge.
- Plans, schedules, and monitors own work competently within limited deadlines and according to relevant legislation, standards, and procedures.
- Contributes fully to the work of teams.
- Appreciates how own role relates to other roles and to the business of the ISSS and clients.
- Understands how own role impacts security and demonstrates routine security practice and knowledge required for own work.
- Ability to commit to actively upholding and consistently practicing personal diversity inclusion and cultural awareness, as well as safety and sensitivity approaches in the workplace.

**Typically, the above qualifications would be attained by:**

Completion of an undergraduate degree in computer science, management information systems or business with three (3) or more years of relevant experience as a programmer developing BI and data analytics components and integrations.

Equivalent combinations of education and experience will be considered.

**ADDITIONAL REQUIREMENTS**

**Position Security (check one)**

No criminal records check required  
 Position of Trust – criminal records check required  
 Highly sensitive position – requires verification of identity and a criminal records check

**French language (check one if applicable)**

French required (must identify required level below)  
Level required for this Designated Position is:  
**ORAL EXPRESSION AND COMPREHENSION**  
Basic (B)  Intermediate (I)  Advanced (A)   
**READING COMPREHENSION:**  
Basic (B)  Intermediate (I)  Advanced (A)   
**WRITING SKILLS:**  
Basic (B)  Intermediate (I)  Advanced (A)   
 French preferred



**Indigenous language:** Select language

- Required
- Preferred