Government of
Northwest Territories

IDENTIFICATION

Department	Position Title	
Education, Culture and Employment	Manager Business Analysis & Projects	
Position Number(s)	**Community**	**Division**
71-412	Yellowknife	Planning, Research and Evaluation

PURPOSE OF THE POSITION

The Manager Business Analysis & Projects sets and enforces business analysis and project management standards related to the design, development, testing, and deployment of Departmental software systems to ensure the continuity of critical Education, Culture and Employment (ECE) applications used to deliver programs and services to the public. They are also responsible for the leadership and oversight of information, communication and technology (ICT) large-scale capital and operating projects for the Department. This individual will apply proven leadership, communication, and problem-solving skills to help assure the quality and delivery of application projects in order to maximize the benefit of system investments.

SCOPE

The incumbent reports to the Director Planning, Research & Evaluation (PRE) to lead the Business Analysis & Projects unit and ECE Information Management Services (IMS) as a whole throughout the software development lifecycle (SDLC) to deliver quality software products and service to ECE's Program Areas. The incumbent leads two (2) Business Analysts, collaborates with the other IMS managers, and works directly with other members of the Department as required to ensure technology solutions are planned, scheduled and delivered to meet identified needs. The incumbent is expected to lead by example and provide exceptional client service to headquarters and regional staff through a proven understanding of software and hardware, in conjunction with exceptional analytical skills, to deliver appropriate, effective and efficient service to support all ECE information, communication and technology systems. The incumbent is responsible for an Operational and Maintenance (O&M) budget of $6.5M and has spending authority of $100,000.

The incumbent is primarily responsible for the processes supporting Business Analysis and Project Management functions in the Department as well as the frameworks used to conduct those activities through the direction of the PRE Director. They are also responsible for managing the technology capital planning process, the prioritization of technology expenditures for the Department, and, managing the project pipeline based on these priorities. This position works directly with, and has a functional reporting relationship on a project-by-project basis to, Senior Managers including the Assistant Deputy Ministers and Directors of the Department, as well as stakeholders from Education Authorities, Aurora College and Regional Service Centres, in conducting business analysis/feasibility studies and managing technology projects in the support of ECE owned technology. The incumbent has considerable latitude to make decisions and must have highly effective decision-making and problem-solving skills in order to ensure that systems are designed and developed to meet complex Departmental needs. Failure to provide adequate services and/or design, develop and safeguard technology systems may result in serious consequences for the department and the government as a whole.

Five critical systems in the application portfolio include, the Case Management & Administrative System (CMAS), Oracle Business Intelligence Enterprise Edition (OBIEE), MyECE web framework and applications, PowerSchool, and Student Data Interchange (SDI).

CMAS, originally developed in 1999 using a custom Java architecture, is a complex and mission critical system. It is the PeopleSoft of ECE. CMAS processes payments totaling over $130 million annually, and, another approximately $140 million in school board funding is directly driven by enrollment reports created from CMAS data. The CMAS system is custom-built and is accessed daily by 12 ECE Program Areas and other GNWT Departments. The system must have 7am-7pm availability Monday to Friday and can be accessed by approximately 800-1,000 clients via MyECE outside of core office hours. Approximately 180+ staff rely on system availability and functionality to deliver critical ECE services to the public. CMAS and its modules represent over 72% of the application portfolio at ECE.

CMAS integrates with Oracle Business Intelligence Enterprise Edition (OBIEE), a near real-time interactive data analysis and reporting tool with 4 software applications, and MyECE, a web technology framework with 2 software applications. Both Business Intelligence (BI) and MyECE are new additions since 2012 that integrate with CMAS' approximate 30 modules and 300 reports.

PowerSchool, also implemented in 2012, is ECE's Kindergarten to Grade 12 Student Information System (SIS) to manage marks, attendance, photos, incidents, disciplinary actions, courses, and report cards. It is used by approximately 1,200 teachers daily within all schools and Education Authorities across Northwest Territories (NWT). SDI, an automated data interchange software application between ECE and Alberta Department of Education, sends diploma exam and other student information to Alberta through web-based technologies five times per year.

Organizational Structure

ECE has a complex and multi-faceted mandate within the Government of the Northwest Territories (GNWT). Through its many programs and services ECE impacts the lives of NWT residents across lifespans through income security, early childhood, adult education, labour-market development, culture, heritage and official languages. The Department has three corporate services division: Policy, Legislation and Communications (PLC); Planning, Research and Evaluation (PRE); and Finance and Capital Planning (FCP). Together, these divisions enhance intradepartmental collaboration through coordinated activities and the setting of standards and expectations.

The PRE division is composed of 3 units:
1.   Research and Program Evaluation Services
2.   Information Management Services
3.   ATIPP and Records Management

Collectively, PRE plays a significant role providing corporate leadership to the Deputy Minister, Assistant Deputy Minister, Directors, and program staff in order to ensure:
- lateral, systems-wide thinking in support of program integration;
- holistic and multi-disciplinary approaches to complex problem areas;
- practical accountability mechanisms that generate meaningful data and adherence to the Department's legislation, directives, and policies;
- leaner, more efficient service delivery through evidence-based decision making; and
- transparent communication in support of public accountability.

Collectively, PRE collaborates with all levels of the education system to provide strategic and evidence-based research, planning, implementation, and evaluation services. Through these services, PRE staff are mandated to support sustainable programs and technology solutions through the following functions:
- Departmental strategic and business planning;
- Statistical analysis and research;
- Program monitoring and evaluation;
- Performance measurement and target development;
- Project management;
- Business analysis;
- Risk management;
- Information systems and technology;
- Information management; and
- ATIPP and records management.

RESPONSIBILITIES

1. **Plan and manage the human and financial resources of the unit to meet divisional and Departmental objectives.**
   - In consultation with the Director, complete O&M budget and expenditure functions within the unit including, tracking actual spend, committed funds and budget forecasts.
   - In consultation with the Director, complete human resource functions within the unit including staffing, performance reviews, and discipline.
   - Ensure unit staff have access to necessary resources, supplies, equipment and information.
   - Inform staff about governmental, Departmental and divisional priorities.
   - Develop annual technology work plans and schedules based on the Department business and work plans that establishes short and long term objectives for the unit.
   - Manage numerous outside suppliers and contractors who perform Information Systems functions.
   - Negotiate, manage and organize all information systems related product and service contracts.
   - Participate on technology related interdepartmental and intergovernmental committees as required.
   - Identify and implement individualized training requirements and opportunities for staff. Acts as a mentor in staff career path planning to ensure the individual member's professional development is supported and funded by ECE, to provide better staff retention and morale.
   - Ensure industry and GWNT standards are used, and with input from the OCIO, develops, updates and ensures Departmental standards are followed in all areas of ECE IMS.
   - Acts as the Director of PRE, Manager Application Development, or Manager Application and Data Maintenance, as required.

2. **Lead the technology related business analysis functions for the Department.**
   - Accountable for requirements management and traceability throughout the SDLC to ensure quality technology solutions.
   - Serve as subject matter expert in business analysis methodology and practices.
   - Provide expert advice and guidance for technology options analysis, needs/feasibility assessments during preliminary analysis phase of projects and proposals.
   - Provide expert advice and guidance for data, process, use-case modeling and prototyping techniques and diagrams to ensure proposed solutions will meet desired outcomes.
   - Provide expert advice and guidance on the elicitation of business, functional, technical, and commercial requirements with stakeholders for technology projects, using a variety of techniques, including but not limited to facilitating workshops, job-shadowing, interviews, document analysis, etc.
   - Provide expert advice and guidance when potential systems, vendors, suppliers, or contractors are investigated to ensure that they are able to deliver new systems based on elicited requirements.

- Provide expert advice and guidance on cost/benefit analyses, recommendations for implementing or upgrading systems, and on the feasibility of projects.
- Provide expert advice and guidance on a variety of analyses, including but not limited to, business rules analysis; effort estimates, options analysis, as well as total cost of ownership on both existing and proposed systems.
- Oversee and ensure that business cases and project proposals are prepared to a high-quality.
- Oversee and ensure that acceptance and evaluation criteria for projects related to information systems and requirements are sound.
- Ensure that business needs are communicated within the technology group and opportunities for business improvement using technology solutions are identified.
- Oversee and ensure that a variety of analytical reports on proposed technology solutions and options to all relevant stakeholders are prepared to a high-quality.
- Employ expert Organizational Change Management techniques to manage the people-side of technology changes to ensure successful implementation and adoption of new technology systems and processes.

3. **Lead technology related project planning exercises for the Department.**
    - Consult with divisions, Aurora College, Education Authorities, and Regional Service Centres within the Department to identify technology systems, internet and intranet needs in the short and long-term.
    - In consultation with the Director, ensure technology project planning aligns to and enables Departmental work plan priorities and outcomes in collaboration with senior management.
    - Determine short, medium and long-term ICT capital needs and priorities in consultation with the Director and Senior Managers of the Department.
    - Provide expert advice and guidance to the Director on current industry technology trends and solutions. Conduct in-depth technology research and analysis and make recommendations concerning current and future systems developments.
    - Prepare the annual ICT Capital Plan for the Department ensuring that the plan is in compliance with Departmental and Office of the Chief Information Officer (OCIO) and GNWT standards and practices.
    - Ensure that all major technology projects comply with GNWT Financial Administration Manual (FAM) rules, have the required ICT capital funding documentation, have appropriate implementation deliverables, and have delivery milestones as defined by the GNWT Systems Implementation Methodology (SIM).
    - Collaborate with the Manager Application Development to plan releases for ECE's custom built technology solutions to ensure releases align to Departmental priorities.
    - Collaborate with the Manager Application & Data Maintenance to plan software upgrades for ECE's commercial off the shelf technology solutions to ensure upgrades align to Departmental priorities.

4. **Lead, develop and enforce technology standards and processes for ECE IMS.**
   - Develop estimation processes and procedures that follow Departmental guidelines in the estimation of service requests and functional enhancements.
   - Research, review, and analyze the effectiveness and efficiency of requirements gathering processes and tools and develop strategies for enhancing or further leveraging these processes.
   - Develop best practices, techniques, and tools for project planning, execution, project management, ongoing milestone/deliverable tracking, communication, and key performance metrics.
   - Develop and implement ECE IMS specific procedures and processes to align with and implement OCIO ICT Policy.

5. **Perform technology project and portfolio management functions for the Department, as required.**
   - Manage multiple project schedules, scope and budget to ensure delivered systems meet the expected outcomes and benefits identified in Project Charters from initiation to closure.
   - Provide management, technical expertise and leadership for major systems and technical IS projects and facilitate the participation and sharing of knowledge and skills within the multi-discipline participants that are involved in IS projects.
   - Ensure that systems are well defined, developed, tested and implemented to meet the information needs of ECE IS clients. Ensure constant communication with stakeholders in the Department and maintain a very hands on approach to monitoring projects.
   - Prepare and manage project budgets and contracts by identifying and implementing technical, human, financial and capital requirements.
   - Identify stakeholders, plan stakeholder engagement, and act as a mediator between stakeholders, working groups, steering committees, and project team members.
   - Identify, analyze, develop, monitor and treat project risks.
   - Identify quality targets and manage formal quality assurance processes via audits and milestone reviews during the project.
   - Identify skills, acquire and coordinate project teams including internal/external staff, contractors, suppliers and vendors.
   - Accept and assess status reports, change requests, and requirements documentation from project managers to ensure smooth project progression.
   - Determine frequency and content of status reports from project managers, analyze results, and troubleshoot problem areas/mitigate project risks. Report on a regular basis the status of projects scope, budget and schedule to the Sponsor, Senior Managers, Project Stakeholders, and the Director of Planning, Research and Evaluation.
   - Conduct project post mortems, ensure project closure reports identify successful and unsuccessful project elements, ensure the repository of project lessons learned is updated and maintained by project managers.
   - Coach, mentor project managers and project team members and influence them to take positive action and accountability for their assigned work.

WORKING CONDITIONS

Physical Demands

The incumbent is required to sit or stand for long periods during work hours including presentations, in meetings, and group or one-on-one planning sessions. The incumbent may frequently sit up to 4 hours per day at a computer analyzing data. Eyestrain, back discomfort and keyboard-induced tensions are the most common problems.

Environmental Conditions

There are no significant adverse environmental conditions associated with this position.

Sensory Demands

The incumbent may spend long periods of intense concentration up to 4 hours per day reviewing and synthesizing data into information. There is a frequent need for accurate rapid visual judgments when providing time-sensitive data. Establishing priorities and balancing these demands is often difficult. Pressure to balance duties, the volume of work and the criticality of information systems contributes to job stress.

Mental Demands

Mental fatigue is extremely common as a result of the heavy workload for the position along with the need to balance competing priorities, the frequent need for intense analytical work and the pressures of managing several complex projects which are often impacted by tight deadlines that are beyond the control of the incumbent can contribute to stress. This work may have financial implications to the Department or clients if delays or inaccurate data occur. Imposed, unexpected demands, competing priorities and ambiguity frequently add to the stress and extreme mental fatigue, in order to provide rapid response and immediate reprioritization of workload to ensure system availability. Mental stress may also be induced as a result of the requirement to continually keep up to date with industry standards and learn new technologies and the use of new or enhanced products. Balancing the mental demands of the role occurs up to 4 hours per day. Some occasional travel is required and would have some disruption to family life.

KNOWLEDGE, SKILLS AND ABILITIES

- Expert knowledge of Project Management Body of Knowledge (PMBOK) and Business Analysis Body of Knowledge (BABOK) particularly in the area of Information Technology.
- Expert knowledge of technology systems design, development, implementation and upgrade.
- Expert knowledge of the GNWT's Systems Implementation Methodology (SIM) and the Systems Development Life Cycle (SDLC) methodology.
- Expert knowledge of Organizational Change Management methods and techniques and Business Process Modelling particularly in the area of Information Technology.
- Expert knowledge of relevant operating systems, hardware environments, software packages, database concepts and tools and data modeling tools.

- Excellent supervisory and leadership skills based on a history of successful software implementations and projects delivered.
- Excellent business analysis, technology management, and project management skills
- In-depth knowledge of software development and hardware capabilities and requirements including delivery platform/technical architecture.
- Ability to facilitate workshops with program area staff for project analysis.
- Ability to conduct feasibility and cost/benefit analysis studies.
- Ability to prepare technical specifications and proposals and review submissions.
- Ability to prepare project budgets and timelines, manage staff and contractors and conduct application testing and commissioning.
- Ability to conduct complex information systems needs assessments and prepare systems designs.
- Ability to develop technical and operational standards, protocols, policies and procedures.
- Excellent priority setting and organizational skills including the ability to manage multiple projects efficiently and effectively using project management tools and methods.
- Excellent verbal and presentation communications skills including the ability to translate complex technical information into plain language for Departmental Senior Management and staff.
- Excellent written communications skills including the ability to develop complex technology strategic and business plans in plain language.
- Proven team leadership skills including the ability to delegate and direct contractors and project staff in a positive, innovative and collaborative manner.

Typically, the above qualifications would be attained by:

The required level of knowledge, skills and ability is typically acquired through the completion of a University Degree in Computer Science or Information Systems Management and at least 6 years of experience in the Information Technology industry including at least 3 years in Business Analysis and project management and at least 2 years managing staff/teams, or, computer or information systems related diploma and 8 years' experience of which 3 years in business analysis and project management and least 2 years managing staff/teams. A combination of 10 years of education and directly related experience would be considered as an equivalency.

Completion of a Project Management Professional (PMP) or a Projects In Controlled Environments (PRINCE2) Practitioner designation is required.

ADDITIONAL REQUIREMENTS

Position Security

☐ 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

☐French required. 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

Aboriginal Language Choose a language:

☐Required
☐Preferred