

Nipissing University

JOB DESCRIPTION

POSITION TITLE:	Manager, Data Analytics and Reporting
DEPARTMENT:	Institutional Planning and Analysis
SALARY LEVEL/CLASSIFICATION:	SL 6
EMPLOYMENT DEFINITION (STATUS):	Full-time Administration
SUPERVISOR:	Director, Institutional Planning and Analysis

SUMMARY OF FUNCTIONS:

Reporting to the Director, Institutional Planning and Analysis, the Manager, Data Analytics and Reporting is accountable for providing proactive, timely and accurate data, models, and reports on a wide range of university activities and issues pertinent to institutional operation and strategic goals. The Manager leads the Data Analytics and Reporting (DAR) team, in providing quality data and analytical support placed in its proper context, to a variety of internal and external stakeholders including, but not limited to, the Institutional Planning and Analysis (IPA) office, VP Finance Office, Provost's Office, Registrar's Office, Graduate Studies Office, Dean's Offices, Federal and Provincial governments, and data sharing consortiums.

The Manager, Data Analytics and Reporting provides leadership with the on-going development of data infrastructure on which institutional reporting, decision making, and planning relies. The Manager, Data Analytics and Reporting leads the design, implementation, and ongoing enhancement of data infrastructure necessary to collect, store, report and analyze data and trends related to university planning and decision making. This allows the development and refinement of university budget and resource planning models, key performance indicators, policy alternatives, and strategic analyses suitable for internal and external dissemination.

The Manager will be leading a team that is dedicated to building a stable and scalable data architecture that addresses issues related to data security, maintenance, standardization, and access with respect to all operational data across the organization. The Manager will have a comprehensive understanding of a wide range of business operations across the organization as well as collaboration with peers at other universities with respect to best practices. They will be focused on engaging senior management and department leaders across the organization and formulate policies and procedures with respect to data stakeholders (e.g. Chair the Data Governance Committee) as well as the formulation of strategies that ensure the IPA office can provide responsive data services.

DUTIES & RESPONSIBILITIES:

Data Analysis and Reporting (35%)

- Manage the development of timely, accurate reports and analytics in support of the academic, fiscal and strategic planning of the university

- Develop and manage an institutional data analytics framework grounded in standards that institutional reporting in a concise, understandable, and effective in informing a wide variety of audiences and users
- Provide high-level analysis and validation/certification of institutional data using best practice methodologies and consistent definitions to support evidence-based decision making
- Develop reliable forecasting and other models to inform and support planning, evaluation and budgeting processes
- Prepare the official government grant claim, as well as other accountability and reporting submissions (e.g. PFIS-USER enrolment submission)
- Prepare data submissions to government and data-sharing consortiums
- Act as lead or co-lead on specific data analytics projects, as required
- Oversee the development and maintenance of web-based reports and fact sheets to enable continuous use of the student, faculty, and topic-based data produced from the Office of Institutional Planning and Analysis
- Develop solutions and reports that respond to complex questions and inquiries from a wide range of stakeholder, customized for their specific needs and context.

Data & Infrastructure Development

(35%)

- Collaborate with university stakeholders (e.g., UTS, Registrar's Office, Data Stewards) on the development and maintenance of optimal data mart/warehousing solutions to serve IPA and institutional strategic needs
- Oversee the development and management of institutional databases that are core to strategic analyses, planning, and accountability reporting (e.g. student "official count date" data, faculty and staff data, and peer university/sector data)
- Develop standardized institutional data definitions and reporting methodologies that can be integrated into institutional data marts/warehouse
- Oversee the ongoing creation of point-in-time data extracts from various institutional transactional systems that allow for consistent historical analysis within and across university data domains/silos
- Partner with stakeholders to maintain and address data quality in University systems
- Collaborate with the Director, Institutional Planning and Analysis to strategize and continuously improve the automation of data reporting and related dissemination processes
- Ensure availability of a responsive data and reporting environment to facilitate university planning and operation
- Oversee research and provide advice on new tools, systems and practices to recommend improvements in data analytics

Leadership and Management

(30%)

- Create team schedules and delegate tasks to ensure proper workflow within the department
- Set goals for performance and deadlines in ways that comply with the University's plans
- Ensure that employees understand their duties or delegated tasks
- Ensure the Data Analytics and Reporting (DAR) team acquires, develops and maintains knowledge of best practices and tools needed for data acquisition, transformation, maintenance, and analysis, as is necessary in post-secondary institutions

- Monitor employee performance and productivity and provide constructive feedback and coaching
- Assist with resolving concerns or issues brought forward by employees
- Participate in the hiring of new employees within the department
- Provide training and overseeing the orientation of new employees
- Participate in the Annual Performance and Development Process as required in conjunction with the Human Resources Department
- Contribute to the development of strategic and operational plans for IPA office, including a reporting strategy for internal and external stakeholders and ongoing establishment of department priorities
- Lead the DAR team in building positive, productive and collaborative relationships within IAP, with each of the Faculties and administrative units
- Ensure the DAR team understands the importance and impact of decisions related to budget and resource allocation and that they are able to model, assess and speak directly to the impacts, potential impacts and consequences
- Develop and nurture strategic relationships with key contacts at the Ministry, the Council of Ontario Universities, and other universities (within Ontario, Canada and abroad)
- Act as official reporting agent and signatory officer for a variety of reports submitted directly to the MCU on behalf of the institution
- Assist the Director, Institutional Planning and Analysis in advanced and complex research, collection, organization, and analysis of data and information
- Prepare executive summary reports and presentations, and undertake special projects
- Develop and deliver presentations at internal and external meetings or conferences
- Act as an expert resource/committee member on/at relevant internal and external committees, councils, or events

Any other duties as assigned.

QUALIFICATIONS:

Education: A university degree (a master's degree is considered an asset) with an emphasis on both qualitative and quantitative research principles, theories and methodologies, a master's degree is considered an asset.

Training and/or experience may be substituted for formal academic training at the discretion of the University.

Training, Experience, Knowledge & Skills Required:

- Three (3) to five (5) years of experience in applied institutional research associated with the post-secondary education sector or public sector organizations that are directly involved with educational policy or an equivalent combination of education and experience
- One (1) to three (3) years of experience:
 - Working with SQL and managing large data sets using relational databases (SQL Server, etc.)
 - In data modeling, ETL development, data warehousing to design and developing and implementing enterprise big data solutions

- Experience with business intelligence software
- Proficiency in programming concepts and programming languages such as Python, R, JavaScript, DAX, M Language, SQL etc.
- Demonstrated experience in developing procedures/protocols to enhance data architecture, data dictionaries, data modeling, data extraction and manipulation, diagnosing and resolving data integrity issues relating to institutional research
- Detailed knowledge of data assessment tools and techniques, survey methods, and database design and management skills
- Experience in data collection, survey design and evaluation, and the implementation of assessment methodologies
- Ability to design research projects relating to policy and planning issues, and a sound knowledge of quantitative research methods
- Advanced proficiency in ERP software (e.g, Colleague, Banner, Peoplesoft)
- Complex problem solving and analytical thinking skills
- Exceptional organizational and time-management skills including the ability to meet numerous competing demands in a highly complex environment
- Ability to work with cross-functional teams in projects to improve organization processes, and institutional reporting
- Initiative and an ability to work independently to propose new projects and tasks that benefit the strategic interests of the University
- Comprehensive understanding of university administrative structures/processes and of the Ontario and Canadian post-secondary education systems, including knowledge of ministry funding mechanisms and higher education policy
- Knowledge of Ministry tuition framework and enrolment reporting guidelines
- Knowledge of Statistics Canada Postsecondary Financial Information Systems (PFIS) and other provincial/federal data sets
- Knowledge of University policies
- Advanced project management skills
- Excellent oral and written communication skills with the ability to present ideas in a clear, concise manner
- Strong editing and proof-reading skills and the ability to adapt to different writing styles
- Knowledge and the ability to apply an understanding of the Province of Ontario's Freedom of Information and Protection of Privacy Act (FIPPA) and other associated privacy legislation
- An understanding of institutional research issues in a Canadian context will be considered an asset

RELATIONSHIPS/CONTACTS:

Supervised by: Director, Institutional Planning and Analysis

Positions Supervised:

- Institutional Analyst

Internal Contacts: Staff, faculty, students,

External Contacts:

- Council on University Planning and Analysis (CUPA)

- Various provincial government representatives
- Other Ontario University representatives

MATERIALS UTILIZED:

- Standard office equipment
- Nipissing University Academic Calendar
- Various University Policies & Procedures Manuals
- Nipissing University Collective Agreements
- Statistical reporting manuals, systems, software packages and data sets

PHYSICAL/MENTAL DEMANDS & WORKING CONDITIONS:

- Regular conflicting priorities time pressures on a daily basis
- Tight timelines on various last-minute projects
- Frequent and intense visual/listening concentration is required
- Occasional requirement to work extended hours, which could include evenings, weekends and/or holidays

I have read my position description and it has been reviewed with my supervisor. I understand what my duties and functions are, and I will carry out all of my responsibilities as herein described.

Employee Name (please print)

Employee Signature

Date

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Approvals

Supervisor

Date

Human Resources

Date