

Job Description



Job Title:	Senior Manager, Research Data Analytics
Department:	Office of the Vice President Research and International
Reports To:	Director, Research Systems and Analytics
Jobs Reporting:	Research Data Analyst
Salary Grade:	USG 12
Effective Date:	June 2021

Primary Purpose

The Senior Manager, Research Data Analytics in the Office of the Vice President Research and International (OVPRI) is accountable to the Director, Research Systems and Analytics for the provision of data analytics and reporting tools and services to the Vice President Research and International (VPRI) portfolio business units and to the broader research enterprise. The Senior Manager, Research Data Analytics manages the data analytics team which supports the provision of data and analytics services, metrics, and tracking frameworks to the VPRI leadership team and the broader research community to ensure strategic priorities are critically examined and that planning activities are grounded in sound and reliable evidence.

Key Accountabilities

Strategic Reporting

- Develops a performance management framework in collaboration with IAP for reporting on the strategic research plan and the research elements in the University strategic plan
- Manages the development of research and commercialization related metrics for strategic planning initiatives and associated progress reports
- Develops standardized institutional data definitions and reporting methodologies in collaboration with IAP, IST, Library and the Faculties
- Maintains a standardized data dictionary for research data on campus, in partnership with IST
- Monitors progress with respect to research aspects of the University and Research strategic plans
- Proactively provides analysis-based advice to University senior leadership to shape the strategic priorities and direction the University takes regarding major research objectives and initiatives
- Advises on the selection and use of appropriate statistical and other methods for responding to the needs of stakeholders
- Has a key role in the development and implementation of the tri-agency research data management strategy, in collaboration with other internal stakeholders

Research Data Analytics

- Manages and continuously improves processes that support data requests and self-serve reports for campus partners
- Manages analytical support, gathering of data and information and the production of reports in support of planning, decision-making and performance reporting
- Manages development of reliable forecasting models, including the projection of Canada Research Chairs based on tri-agency market shares
- Liaises with staff within the OVPRI portfolio, in other units of the University, at other universities, or at sponsoring agencies to elucidate context, locate the best available data, and coordinate activities
- Oversees the collection, verification, graphing of data, projections, and models

- Resolves any concerns related to research data by documenting methodologies, including all weaknesses and limitations that cannot be overcome
- Analyzes the significance to the University of the outcomes discovered
- Prepares tables and graphs, slides, briefing notes, reports and other presentation materials to be used by senior leadership
- Attends meetings, as appropriate, to answer questions on the information derived from the analyses conducted
- Uses and develops reporting and analysis tools, including Excel, Cognos, Power BI

Stakeholder Engagement

- Verifies, understands and explains the use of university information in external contexts, including those related to national and international rankings and surveys
- Encourages and facilitates cross-functional and cross-project collaboration among analysts in other university departments
- In partnership with IST and the Library, ensures systems and data within the OVPRI business units are secure from data breaches and other security threats and that employees and faculty are advised and trained on the security of storing research data
- Manages, clarifies, and streamlines data access controls and permissions
- Ensures that the use of institutional research performance data by Faculties or Academic Support Units, particularly that intended for external audiences, conforms to and is consistent with the highest standards of analysis, proper interpretation and respects appropriate confidentiality considerations
- Serves as a data and analytics subject matter expert and/or point of contact representing VPRI on institutional data and analytics strategic initiatives
- Participates in relevant working groups and communities of practice to ensure a coordinated approach to supporting various internal/external KPI exercises and the deployment of resources and the acquisition of tools/products to ensure the institution's ability to undertake critical analyses
- Contributes content, ideas, or identifies areas for development or strategic advancement
- Collaborates with other key central units including IST, IAP, the Library and Faculties on appropriate institutional level reporting tools and dissemination processes such as Power BI to provide dashboards and standard reporting on research across faculties
- Engages with representatives at other institutions, sponsoring agencies, or relevant organizations
- Mentors and enables campus units in the use of data and tools

Project Management and Continuous Improvement

- Manages specific data analytics projects ensuring best practice methodologies and consistent definitions are used to support evidence-based decision making
- Manages, coordinates and advises on the initiation and implementation of research or job description evaluation projects that address research performance
- Identifies and manages the implementation of continuous improvement of business processes, including relevant data systems, for OR reporting of research funding and impact to the broader university community
- Investigates new tools, datasets, systems and practices to recommend improvements in data analytics practices
- Develops short-term and long-term plans for the evolutions of related information systems and tools
- Participates at a senior level in the procurement (including RFI/RFP), implementation and ongoing operation of information systems relevant to the portfolio

Leadership and Supervision

- Manages the OVPRI Research Analytics team ensuring appropriate hiring and team management practices are in place to ensure achievement of team goals and objectives

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- Manages and supports the team with complex initiatives.
- Ensures that staff receive appropriate coaching, training, and opportunities for personal growth and professional development
- Evaluates the contribution of direct reports, providing ongoing feedback and conducting Annual Performance Reviews
- Ensures that all staff under their direction participate in the establishment of, and adherence to, strategic plans for the achievement of departmental and team objectives
- Ensures the creation and maintenance of a work environment that fosters, recognizes and rewards consistent application of the Basic Principles of the University of Waterloo workplace
- Identifies and directs the execution of strategies for promoting team development, cohesiveness, motivation, and commitment to the delivery of outstanding customer-focused service and continuous quality improvement
- Prioritizes projects and activities, appropriately delegating responsibility, allocating work, and deploying resources
- Other general and specific duties as required

**All employees of the University are expected to follow University and departmental health and safety policy, procedures and work practices at all times. Employees are also responsible for the completion of all health and safety training, as assigned. Employees with staff supervision and/or management responsibilities will ensure that assigned staff abide by the above, and actively identify, assess and correct health and safety hazards, as required.*

Required Qualifications

Education

- Bachelor's degree in Mathematics, Computer Science, Statistics, Management Sciences or another related discipline. Graduate degree preferred.
- A combination of education and experience may be considered

Experience

- 3-7 years of progressive experience in data analytics, statistical analysis methods and performance metrics preferably in a research or academic environment.
- 2-4 years of providing strategic advice to those in institutional leadership roles is preferred
- 2-4 years of management experience in a research-driven academic environment is preferred

Knowledge/Skills/Abilities

- Technical expertise at the expert level in data collection and research methodologies, quantitative and qualitative data analysis, development of accountability frameworks and decision support processes and systems
- Exceptional understanding of data management concepts and relevant analytical applications
- Strong organizational, analytical and problem-solving skills
- Problem-solving, negotiation and decision-making skills to influence management, as well as internal and external partners
- Ability to work independently and as a member of a team
- Exceptional oral and written communication skills
- Excellent interpersonal skills with the ability to build effective relationships and partnerships across all organizational levels
- Strong leadership and project management skills
- Attention to detail
- Proven success in diagnosing, isolating, and resolving complex issues and processes, and recommending strategies and plans to senior leadership

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- Ability to communicate technical concepts to technical and non-technical audiences
- Flexible adaptable management style. Ability to conceptualize and address current and future challenges in a logical manner.

Nature and Scope

- **Contacts:** Internally, the Senior Manager, Research Data Analytics must build close relationships with colleagues both within the Office of Research and with other academic support units such as the Library, IAP and IST. They also must consult with and provide advice to the Director, Research Systems and Analytics, the VPRI and senior leadership team within the VPRI business units, and to Faculty ADRs and Deans. Externally, communicates effectively on behalf of the University with software/system vendors and various government departments and agencies
- **Level of Responsibility:** Responsible for ensuring that reports and data are secure and appropriately maintained. Responsible for ensuring the integrity and accuracy of research data reported both externally and internally. Responsible for providing key research data analytics and performance metrics as an aid to senior leadership decision making
- **Decision-Making Authority:** Provides expert strategic decision-making support to the Director, Research Systems and Analytics and to the VPRI and senior leadership team on research systems and analytics. Establishes the priorities of the Research Analytics team to meet objectives.
- **Physical and Sensory Demands:** Minimal demands typical of a leadership position operating within an office environment
- **Working Environment:** Minimal exposure to disagreeable conditions typical of a leadership position; exposure to stress and pressure associated with senior-level responsibilities