Job Description

JOB TITLE:	Manager, Data Analytics and Reporting	DATE:	January 10, 2016
REPORTS TO:	Associate Director, Institutional Analysis & Planning		
JOBS REPORTING:	Institutional Analysts		
LOCATION:	Main Campus		
GRADE:	USG 13—35 hr/wk		
DEPARTMENT:	Institutional Analysis & Planning		

PRIMARY PURPOSE: The Manager, Data Analytics and Reporting in Institutional Analysis & Planning 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 incumbent leads a team of Institutional Analysts 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 IAP office, Provost's Office, Faculties, Registrar's Office, Graduate Studies Office, Federal and Provincial governments, and data sharing consortiums. The incumbent manages, enhances, and coordinates the on-going development of data infrastructure on which institutional reporting, decision making, and planning relies. The DAR Manager 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, performance indicators, policy alternatives, and strategic analyses suitable for internal and external dissemination. The Data Analytics team develops the necessary models and projections to ensure that various strategic issues and priorities are critically examined and that the planning activities are grounded in sound and reliable evidence. The team provides the foundation to all data and analytical functions within Institutional Analysis and Planning. As such, it is critical that the DAR team initiates and maintains productive and collaborative relationships within IAP, uWaterloo and with external partners.

KEY ACCOUNTABILITIES:

Include 3-4 key accountabilities of the role. These key accountabilities should reflect 80%-90% of "what the job does not the "how".

1.	**Data Analysis & Reporting**
	- Development of timely, accurate reports and analytics in support of the academic, fiscal and strategic planning of the university - Presenting data analytics in an efficient and easily understandable way to a wide variety of audiences and users, using various reporting formats and web technologies - Analysis of institutional data using best practice methodologies and consistent definitions to support evidence-based decision making (e.g. retention, graduation, and time to completion analysis) - Development of reliable forecasting and other models to inform and support planning, evaluation and budgeting processes - Production of the official government grant claim, as well as other accountability and reporting submissions (e.g. USER enrolment submission, degrees granted) - Preparation of data submissions to government and data-sharing consortiums - Leadership or co-leadership on specific data analytics projects, as required - Development and maintenance of web-based reports and fact sheets to enable continuous use of the student, faculty, and topic-based data produced from IAP - Respond to various questions and inquiries from stakeholders to support decision making processes

		• Develop solutions and reports that respond to a breadth of stakeholder needs
2.	**Data Warehousing & Infrastructure Development**	• Collaborate with university stakeholders (IST, Faculties, Data Stewards) on the development and maintenance of optimal data mart/warehousing solutions to serve IAP and institutional strategic needs • Development and management of institutional databases that are core to strategic analyses, planning, and accountability reporting (e.g. student "official count date" data sourced from Quest, institutional space data, faculty and staff data, and peer university data) • Development of standardized institutional data definitions and reporting methodologies that can be integrated into institutional data marts/warehouse • Ensure 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 IAP team members to improve and automate data reporting and dissemination processes • Work with IST to facilitate the efficient development, enhancement and maintenance of IAP's computing environment • Ensure availability of a responsive data and reporting environment to facilitate university planning and operation • Research new tools, systems and practices to recommend improvements in data analytics
3.	**Supervision**	• Motivate and develop staff by providing continuous feedback, coaching and guidance to IAP analysts in their tasks, projects, and professional development • Preparation and use of annual performance reviews of the Institutional Analysts • Coach, mentor, and support Institutional Analysts and facilitate development of their professional expertise • Advising Institutional Analysts on the selection and use of appropriate statistical and other methods for responding to the needs of stakeholders • Encourage and facilitate cross-functional and cross-project collaboration among institutional analysts within IAP and with analysts in other university departments
4.	**Leadership, Relationships and Collaboration**	• Contribute to the development of strategic and operational plans for IAP and establishment of the priorities for the office • Ensure the 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 • Guide the DAR team in building positive, productive and collaborative relationships within IAP, with each of the Faculties, administrative units, and the senior leadership team • 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 an effective and efficient team environment by motivating, developing and guiding Institutional Analysts on the DAR team • Develop and nurture strategic relationships with key contacts at the MAESD, the Council of Ontario Universities, and other universities (within Ontario, Canada and abroad) • Undertake and assist in advanced and complex research, collection, organization, and analysis of data and information

- Prepare technical and business reports and presentations, and undertake special projects
- Develop a productive, collegial working relationship with the IAP leadership team.
- Prepare and deliver presentations at internal and external meetings or conferences
- Participate in relevant internal and external committees and councils, or events

POSITION REQUIREMENTS:
If hiring today, what would be the minimum requirements?

Education: Graduate degree or a bachelor degree in Mathematics, Computer Science, Statistics, or another related discipline. A combination of education and experience may be considered.

Experience: 3+ years' experience in data analytics, development and use of data marts/warehouses and associated business intelligence applications. Experience with ETL processes, data management, and improvement of reporting systems. Experience in post-secondary education system is an asset.

Technical: This position requires strong educational and professional background in database development, data transformation, data management, statistical, and other, data analyses.

MS Word	Excel	PowerPoint	Other
Intermediate	Advanced	Intermediate	Knowledge of student data systems (USER, Quest), Statistical packages; ETL methods and tools, visual analytics

NATURE AND SCOPE:
- **Interpersonal Skills:** Communication, facilitation, presentation, building consensus, diplomacy, problem solving, relationship building.
- **Level of Responsibility:** Staff management, leadership, influencing, coaching, directing
- **Decision-Making Authority:** Coaching and leading staff; Provision of advice and recommendations to senior administrators
- **Physical and Sensory Demands**: Extensive computer use; prolonged sitting (e.g. office work, meetings)
- **Working Environment:** Office-based work, with meetings across campus; occasional travel