CITY OF HAMILTON

CORPORATE SERVICES DEPARTMENT
(INFORMATION SERVICES DIVISION – BUSINESS APPLICATIONS - LOCATION – 55 YORK BLVD., 6th FLOOR)

DATA INTEGRATION ANALYST

SUMMARY OF DUTIES

Reporting to the Supervisor of Data Services, the Data Integration Analyst will use their advanced knowledge and skill set to lead in the architectural design and development of data warehousing activity within the City of Hamilton. These activities will include but are not limited to modelling data warehouses & data marts, development of metadata strategies, creation & support of data integration & quality assurance processes and methodologies. As an experienced professional, the candidate will be expected to understand and employ Business Intelligence best practices in all design and development activities within this discipline.

Through project and operational roles, the Data Integration Analyst provides the identification and resolution of information flow and content issues and the transformation of business requirements into data models. A key focus is the identification of opportunities to reduce data redundancy through identification of trends in data uses and single sources of data. The Data Integration Analyst is also responsible for providing technical expertise for the development of complex enterprise-wide business intelligence and decision support systems solutions.

The Data Integration Analyst is required to decompose and intimately understand the large complex data structures that are related to the applications implemented within the COH, as well the analyst is expected to identify the business logic that is applied to the raw data generally in the form of a front end application i.e. PeopleSoft HR. It is the responsibility of the analyst to thoroughly document their findings thus establishing themselves as the resident expert in the source systems data.

It is the responsibility of the Data Integration Analyst to stay current with technology and methodologies that span the breadth of data warehousing and BI within the City of Hamilton as well that they will fill the role of mentor to the rest of the BI team.

Operationally the Data Integration Analyst will be responsible for ensuring that the scheduled ETL jobs run successfully to completion with the designed outcome as well they are responsible for the ownership and successful resolution of operational issues as they occur. It is anticipated that the Data Warehousing environment will utilize MS Integration Services (SSIS) for data migration from Oracle and other SQL Server instances, and MS Analysis Services (SSAS) for dimensional data requirements.

GENERAL DUTIES

Defines and implements data warehouse architecture, standards, policies, procedures and best practices as they pertain to all facets of data warehousing.

Takes the lead role in the definition, implementation and support of the enterprise repositories.

Identifies data access strategies in terms of data availability, accuracy and security.

Assumes the role of technical subject matter expert for the tools and products that are employed in the creation and delivery of the data warehousing within the COH.

Perform ongoing research into the new and emerging technologies and methodologies as they relate to data warehousing and business intelligence.

Act as a mentor to other team members ensuring that all aspects of work done by the BI team is done so using

industry approved technology and methodologies.

Works directly with key business stakeholders to perform requirements gathering, address issues, and recommends solutions that focus on delivering information and analysis critical to their decision making process.

Decompose large complex data repositories and the business logic required to transform the raw data into usable information. Document findings and fill the role of data export in all matters focused on the extraction and use of data from these source repositories.

Demonstrates an in-depth understanding of source systems and specifically their data repositories by converting business requirements into functional and technical specifications including data mapping of source data elements and ETL transformation rules to the data warehouse physical structures.

Will be required to mine highly sensitive data from both PeopleSoft HR and Financials databases requiring knowledge of both location and context of the source data elements; data validation and scrubbing is a critical requirement when working with PeopleSoft data.

Works closely with end users to define and implement a robust metadata management strategy, and address all aspects of data management including data ownership, security and data administration.

Performs Dimensional, Logical and Physical Data modelling as required to support all stages of warehousing with particular focus given to the consumption of data by various types of business intelligence applications and tools.

Analyzes current business practices, processes and procedures, and identifies future business opportunities for leveraging the data warehouse and Business Intelligence.

Develops and implements ETL solutions to meet business and project requirements which may include the creation /maintenance of database functions and stored procedures;

Implements data quality control, data validation & cleansing, data profiling and standardization using routines to increase data usability, functionality and ensure reconciliation.

Monitors and provides ongoing support for data warehouse and ETL environments and processes including nightly production processes and support failed job recovery efforts. Leads and executes activities which result in the resolution of daily issues and requests.

Provides IS Management with risk assessments to advise them of critical issues that may affect customer, or corporate security objectives.

Maintains knowledge of changing technologies, and provides recommendations for adaptation of new technologies or policies relating to data and database management systems, processes and standards.

May be required to provide after hours on call support to users.

May be assigned to an initiative or project requiring the individual to take direction from other IS Unit Manager, Supervisor, and/or Project Manager.

Works in accordance with the provisions of applicable Health and Safety legislation and all City of Hamilton corporate and departmental policies and procedures related to Occupational Health and Safety.

Performs other duties as assigned, which are directly related to the major responsibilities of the job.

QUALIFICATIONS

1. University Degree or College Diploma in Computer Science, Information Systems or related discipline.

2. Three (3) to five (5) years experience in Data warehousing and Business Intelligence design concepts.

3. Extensive knowledge of Data warehousing and Business Intelligence design concepts including Dimensional Modelling, Denormalized Data Structures, OLAP, and Data Warehousing concepts.

4. Strong data cleansing and standardization skills to ensure consistent consolidated reporting.

5. Working experience of Enterprise level data analysis, reporting and business intelligence concepts.

6. Significant experience with transact SQL, the creation and maintenance of Stored Procedures, Microsoft Integration (SSIS) and Analysis Services (SSAS). Database and ETL administration.

7. Working knowledge of SQL Server Reporting Services (SSRS), SharePoint Dashboard Creation and KPI's, Excel Services and PowerPivot is a plus.

8. Advanced working knowledge of relational database management system software (ORACLE, Microsoft) and SQL (Structured Query Language).

9. Working knowledge of application development lifecycles and supporting practices.

10. Working knowledge of application and data quality assurance best practices, including backup, recovery and business continuity.

11. Knowledge of fundamental ITIL standards.

12. Proven analytical and problem-solving abilities.

13. Strong leadership skills.

14. Ability to make sound and logical judgments.

15. Demonstrated leadership and personnel/project management skills.

16. Strong interpersonal, written, and oral communication skills.