

IOWA DEPARTMENT OF ADMINISTRATIVE SERVICES ▼
HUMAN RESOURCES ENTERPRISE
DATA WAREHOUSE ANALYST

DEFINITION

Performs professional data warehouse/decision support systems work involving identification/definition of system business requirements, technical program components (e.g., hardware, software), the design/development of prototype outputs, system testing and training of end-users; translates technical detail documentation into business process maps, procedures, flow charts, and other application formats; performs related work as required.

The Work Examples and Competencies listed are for illustrative purposes only and not intended to be the primary basis for position classification decisions.

WORK EXAMPLES

Works with end-users and coordinates efforts of technical Data Warehouse/Decision Support System (DW/DS) staff to define business requirements and translate those requirements into logical dimensional database models; populates data mart databases with data from data warehouse/operational data stores, updates metadata repository with details on the nature and use of applications/data transformations (e.g., data aggregations) and monitors performance of data mart databases.

Analyzes, defines and documents business processes and maps source system data flows to business processes; identifies explicit and implicit business rules within source system programs/processes.

Traces data elements required to meet business requirements to originating source systems; documenting sources, data element descriptions, nature and use of selected data elements, and technical definitions of source data elements.

Coordinates the design/development of prototype outputs, establishing output parameters, determining aggregation levels and detail drill-down capabilities, output formats and graphical requirements, and identifies/documents data security and privacy requirements.

Plans technical unit system testing and coordinates system testing with end-user unit; creates/monitors the execution of test plans, documents results and facilitates movement of tested outputs to production status.

Analyzes data management systems and sub-system applications, mainframe data sets and databases; studies data elements/information flows and evaluates data import requirements (form, fit and function) to meet end-user requirements.

Provides/coordinates training efforts within DW/DS and oversees training provided to end users by staff on selected technologies (e.g., web-based programming, Business Objects, Microsoft's Analysis & Reporting Services and Excel Pivot tables) and other applications used as database access tools.

Manages services request process by receiving new requests for reports/query generation from policy, field and management staff, translates requests to technical requirements and distributes to team members; interacts with end users/technical staff to ensure accurate identification of desired outputs, data requirements, business rules and application functionality.

Works with Extraction, Transformation, and Load (ETL) personnel to review, design and implement new/modified ETL processes; works with end users and source-system personnel to integrate robust error-handling processes to ensure discrepancies are quickly resolved; ensures involved parties understand their roles.

Provides reports to management on outputs generated, service requests accomplished and monitors the service delivery cycle-time requirements.

COMPETENCIES REQUIRED

Knowledge of management practices, theories, techniques and methodologies including relationships to the Data Warehouse concept.

Knowledge of current trends and developments regarding structured business analysis.

Knowledge of the use of database modeling tools such as Power Designer or Erwin.

Knowledge of all aspects of Data Warehouse best practices and procedures including requirements analysis, ETL, metadata management, dimensional database design, conformed dimensions, and business intelligence tools.

Ability to create and use business process maps, flowcharts and diagrams to document and describe technical processes and procedures.

Ability to analyze the impact of program and/or regulatory changes on existing data structures within the warehouse environment and identify changes required in both data delivery or information access applications.

Ability to analyze complex and involved agency operations and/or procedures; to study system components and determine feasibility of adapting to automation; to evaluate potential operational and/or procedural changes; and to prepare cost/schedule estimates for project completion.

Ability to work with business and technical staff to determine and document existing business rules, processes and procedures in conjunction with detailing existing data flows within current operational systems; ability to identify optimal data extraction points based on informational requirements and business processes, and coordinate data extraction process(es).

Ability to translate and write T-SQL queries to extract data from an SQL Server database; ability to compile, organize and aggregate data to meet business information requests.

Ability to work with different groups of consumers with various levels of technical knowledge to help them define analytical, management, statistical, and tracking report needs.

Ability to translate customer requests into technical design documentation.

Displays high standards of ethical conduct. Exhibits honesty and integrity. Refrains from theft-related, dishonest or unethical behavior.

Displays a customer service orientation, working with policy, field, and technical staff in determining solutions to meet business requirements while maintaining the integrity and reliability of the data warehouse technical architecture.

Works and communicates with internal and external clients and customers to meet their needs in a polite, courteous, and cooperative manner. Committed to quality service.

Displays a high level of initiative, effort, and commitment towards completing assignments efficiently. Works with minimal supervision. Demonstrates responsible behavior and attention to detail.

Responds appropriately to supervision. Follows policy and cooperates with supervisors.

Aligns behavior with the needs, priorities and goals of the organization.

Encourages and facilitates cooperation, pride, trust, and group identity. Fosters commitment and team spirit.

Expresses information to individuals or groups effectively, taking into account the audience and nature of the information. Listens to others and responds appropriately.

EDUCATION, EXPERIENCE, AND SPECIAL REQUIREMENTS

Graduation from an accredited four-year college or university with demonstrated experience equal to three years of full-time work accomplishing activities related to formal or informal data warehousing decision support systems. Experience should include both technical and non-technical activities, including integrating mapping data needs, data flows and business processes;

OR

substitution of experience of the caliber and scope indicated above for the required undergraduate college education on the basis of one year of qualifying experience is equivalent to one year of undergraduate education;

OR

substitution of twenty-four hours of graduate level course work in a special program curriculum such as Social Work, Public Policy, or Business Administration or related field for each year of the required experience of the caliber and scope indicated above to a maximum substitution of two years;

OR

employees with current continuous experience in the state executive branch that includes experience equal to twelve months of full-time work as a Fiscal & Policy Analyst, Fiscal & Policy Analyst Senior, Management Analyst 4, Income Maintenance Worker 6, Social Worker 6 or Statistical Research Analyst 3. Experience must include both technical and non-technical activities related to formal and informal data warehousing, decision support systems, or significant levels of management analysis and reporting or function in a systems liaison role.

Effective Date: 6/06 CP