CITY OF CARLSBAD
CLASS SPECIFICATION

JOB SERIES: **BUSINESS INTELLIGENCE ANALYST**
                              BUSINESS INTELLIGENCE & ANALYTICS MANAGER

DEPARTMENT: **INFORMATION TECHNOLOGY**

DISTINGUISHING FEATURES AND SUMMARY DESCRIPTION:

The primary purpose of positions in this job series is to use experience and expertise to design and support business intelligence applications.

The **Business Intelligence Analyst** is a full professional leveled role. This position provides data warehouse architectural design, development and support in multi-platform environments, works on multiple projects as a team member; may lead projects of moderate complexity and may supervise less experienced staff. **Business Intelligence & Analytics Manager** is an expert/lead technical role that provides technical expertise and direction for the development of complex enterprise-wide business intelligence and decision support systems solutions; works on multiple projects as a project leader or sometimes as a business subject matter expert; works on highly complex projects that require in-depth knowledge across multiple technical areas and business segments. Supervises assigned staff, coaches and mentors more junior technical staff.

DUTIES AND RESPONSIBILITIES:

Business Intelligence Analyst

Leads business analysis tasks and coordinates with IT (project manager, business analysts) and stakeholders for the full business cycle of related projects.

Gathers and assesses business information needs and prepares system requirements.

Performs analyses, develops and evaluates data mining in a data warehouse environment to include data design, database architecture, metadata and repository creation.

Uses data mining and data analysis tools.

Reviews and validates data loaded into the data warehouse for accuracy.

Interacts with user community to produce reporting requirements.

Provides technical consulting to users of the various data warehouses and advises users on conflicts and inappropriate data usage.

Provides prototyping solutions, prepares test scripts, and conducts tests for data replication, extraction, loading, cleansing, and data modeling for data warehouses.

Maintains knowledge of software tools, languages, scripts, and shells that effectively support the data warehouse environment in different operating system environments.

Possesses working knowledge of Relational Database Management Systems (RDBMS) and data warehouse front-end tools.

Must have an extensive knowledge of data warehouse and data mart concepts.

Sets and conducts requirements sessions.

Manages requirements specifications.

Drives solution options analysis along with technical team.

Reviews test cases, develops user acceptance testing test scripts.

Provides status updates to project manager.

Business Intelligence & Analytics Manager

Leads the design and support of data architecture, database design and integration, transformations, and load processes.

Performs data analysis to design and develop appropriate design models for warehouse and analytics.

Collaborates with team to establish data architecture design.

Develops logical and physical data models to support design and development of data warehouse and data marts.

Works in partnership with database administrators to implement physical data model into high performing databases.

Translates client user requirements into data flows and data mappings.

Architects, develops and implements data integration process using data integration tools to load data warehouse and data marts.

Troubleshoots and provides technical assistance in the use and understanding of existing data warehouse applications.

Works with enterprise-wide business and IT senior management to understand and prioritize data and information requirements.

Solves complex technical problems.
Optimizes the performance of enterprise business intelligence tools by defining data to filter and index that add value to the user.

Creates testing methodology and criteria.

Designs and coordinates a curriculum for coaching and training customers in the use of business intelligence tools to enhance business decision-making capability.

Develops standards, policies and procedures for the form, structure and attributes of the business intelligence tools and systems.

Develops data/information quality metrics.

Researches new technology and develops business cases to support enterprise-wide business intelligence solutions.

Knowledge and Abilities:

- Data integration and tools.
- Complex data analysis.
- Database warehousing and business intelligence.
- Application development using .NET.
- Trends and developments in business intelligence practices and related technologies, operating systems and application development.
- Project management practices and the ability to manage multiple projects simultaneously.
- Programming or shell scripting.
- Production support experience utilizing effective communication, troubleshooting skills.
- Business intelligence services for analytics, reporting and data transformation.

EDUCATION AND EXPERIENCE

Business Intelligence Analyst

Education: Bachelor's Degree in Computer Science, Information Systems, or other related field or equivalent work experience.

Experience: Typically has 5 to 7 years of business analyst work experience and experience using business intelligence tools and systems.

Business Intelligence & Analytics Manager

Education: Bachelor's or Master's Degree in Computer Science, Information Systems, or other related field or equivalent work experience.

Experience: Typically has 7 to 10 years of experience with large and complex database management systems, business intelligence tools and systems.

JOB SERIES ESSENTIAL FUNCTIONS

The conditions below are representative of those that must be met by an employee to successfully perform the essential functions of the job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

Language Ability:

- Requires ability to compare, count, differentiate, measure and/or sort, assemble, copy, record and transcribe data and information. Must be able to classify, compute, tabulate, and categorize data. Must be able to advise and provide interpretation to others on how to apply policies, procedures, and standards to specific situations. Needs to be able to

use a variety of descriptive data and information such as: a variety of plans; resolutions; maps; reports; computer software operating manuals; procedures; guidelines; and routine correspondence.

- Must be able to communicate orally and in writing, clearly and concisely and in a non-technical manner with city personnel at all levels; consultants; vendors; and the general public.
- Needs the ability to read, analyze, and interpret general business periodicals, professional journals, technical procedures, or governmental regulations. Must be able to write reports, business correspondence, and procedure manuals.   Needs to effectively present information and respond to questions from groups of managers, clients, and the general public.

Mathematical Ability:

- Knows how to apply mathematics, including basic algebraic, plane geometric and trigonometric formulas.
- Must be able to demonstrate ability to calculate percentages, fractions, decimals, volumes, ratios, and spatial relationships.
- Needs to be able to interpret basic, descriptive statistical reports.

Judgment and Situational Reasoning Ability:

- Must be able to use functional reasoning and apply rational judgment when performing diversified work activities.
- Needs to be able to analyze data and information using established criteria in order to determine consequences and identify and select alternatives.

PHYSICAL REQUIREMENTS:

- Needs to be able to operate equipment and machinery with some requiring rapid adjustments such as a computer keyboard and terminal, digitizer, plotter, blue line printers, photocopier, calculator, drafting instruments, and engineer and architect scale. Must be able to coordinate eyes, hands, feet and limbs in performing skilled movements such as rapid keyboard use. Needs to be able to recognize and identify degrees of similarities or differences between characteristics of colors, textures, and forms associated with job-related objects, materials, and tasks.
- Essential and marginal functions may require maintaining physical condition necessary for sitting for prolonged periods of time. Must be able to exert light physical effort, typically involving lifting, carrying, pushing and pulling of up to 30 pounds. Tasks may involve extended periods of time at a keyboard or workstation. Needs to be able to perform frequent downward flexion of neck, side-to-side turning of the neck, fine finger dexterity and grasp to manipulate the keyboard, telephone, writing instruments, papers, books, manuals, and reports.
- Job entails occasional walking, standing, bending, stooping, climbing, and reaching at and above shoulders and twisting at the waist. On an infrequent basis, the incumbent must be able to squat and kneel.
- Work may involve occasional outdoor fieldwork.

- Overtime and attending meetings outside regular work hours may be required. Work environment is professional and both team and autonomy oriented. This position is impacted by urgent time deadlines due to various reporting and filing requirements. Positions in Public Safety involve support of a 24/7/365 days environment and/or duties to support the Safety Department or city emergency operations.
- There is some repetitiveness in program coding, a need for extreme accuracy, and paying attention to detail. Additionally, there is a need to be able to shift attention before tasks are completed to be able to balance user demands, telephone and other interruptions.
- Must be able to drive and maintain a California Class C Driver's license or ability to arrange transportation for fieldwork or visits to other city facilities when necessary.

This is an at-will management classification.

DATE APPROVED: Nov. 18, 2014