The Business Intelligence (BI) Architect leads the process of defining and building data management solutions for the University’s warehousing and business insight/reporting platforms. Develops innovative solutions, explores new technologies and makes data recommendations to support optimal BI performance. Creates and supports the development of long term strategies and direction for defining BI architecture principles and standards. Assesses the current state of data management and designs the data warehouse platform, data movement (ETL) and tools/methods used to safely expose content to data consumers.

DUTIES AND RESPONSIBILITIES

Leads the process of defining and building data management solutions for the University’s warehousing and business insight/reporting platforms. Develops innovative solutions, explores new technologies and makes data recommendations to support optimal BI performance.

Creates and supports the development of long term strategies and direction for defining BI architecture principles and standards. Assesses the current state of data management and designs the data warehouse platform, data movement (ETL) and tools/methods used to safely expose content to data consumers.

Oversees the work activities of IT Services Business Analysts to identify candidate data sources which meet analytical requirements across various subject areas by:

- Providing technical advice and guidance;
- Conducting technical architecture design reviews;
- Identifying gaps and risks.

Oversees the mapping process of data sources and data movement to ensure data quality, awareness, visibility and re-use.

Designs, builds, documents and manages data warehouse objects; and defines data management solutions for warehousing and business insight/reporting platforms.

Consults with business stakeholders to determine the priority needs and requests for business metrics and data solutions; and analyzes business needs to select suitable hardware/software platforms to move, store and expose data warehouse content.

Designs and facilitates the development of ETL processes and infrastructure at the program and project levels using SQL Server Integration Services. Responsible for complete projects, through the entire lifecycle of:

- Collecting requirements;
- Recommending and designing the appropriate solution;
- Creating and implementing project plans and timelines.

Establishes and implements technical standards and design patterns for the delivery of business intelligence (BI) and data warehouse (DW) solutions. Maintains architecture deliverables for data management strategies, solution data flows, and business data objects.

Provides technical leadership, coaching and mentorship to project team members as required; and oversees project delivery in terms of data solutions deliverables.

Collaborates with other technical leads/architects to ensure the most innovative technologies and methodologies are being incorporated into client applications and to define the DW/BI strategy and process for:

- Operations;
- Technical architecture;
- Hardware requirements;
- Database Management System (DBMS) requirements;
- Middleware requirements.
Monitors BI tool usage; captures data; and creates and maintains metrics to support business operational decisions by end users and BI consumers (i.e., Deans, Management, etc.).

Provides technical guidance to database administrator staff on data sources, data structure and data access.

Collaborates with IT Services Business Analysts, Developers, Data Analysts and other functional managers; reviews the current state of the data architectural design and proposes a new data architecture for future state; and documents the ETL processes.

Provides technical training to new staff to support BI architecture, and ensures staff adhere to best practices and meet delivery objectives.

Works with internal business sponsors (i.e., University Registrar, Associate Registrar, Student Services, etc.) and domain experts to identify and prioritize content development and propose solutions to address issues/opportunities.

Works with business sponsors and technical resources to define:
- Appropriate Service Level Agreements
- Data Stewardship
- Metadata Management Policies / Procedures
- Data Security Requirements And Processes
- Data Retention And Backup Strategies

Keeps current on BI industry best practices associated with the development, use and governance of data and information within a dynamic enterprise, and relevant new technologies entering the market.

**DECISION MAKING**

Decisions often involve collaboration with institutional level information technology Directors, the Chief Information Officer and senior academic executives, as outcomes may impact institutional level technology planning.

- Makes decisions relating to the design and management of data warehouse projects.
- Makes decisions relating to the development of ETL processes.

**RELATIONSHIPS**

- **Supervisory**
  - No direct reports.

**Primary Working Relationships**

- **Internal Connections** - Works closely with Dean, Associate Dean, business sponsors, program directors, faculty and staff.

**QUALIFICATIONS**

Master’s degree in Computing Science or related discipline and ten years of related experience, including experience developing Business Intelligence solutions and managing data warehouse projects, or an equivalent combination of education and experience.

- Excellent knowledge of the development of data warehouse architectures for large volume reporting solutions.
- Excellent knowledge of database development and the use of data analysis and extraction techniques.
- Excellent knowledge of key application diagnosis tools.
- Good knowledge of Project Management principles and processes.
- Good knowledge of multiple reporting tools, such as Tableau reports utilizing both relational and multidimensional tool architectures.
- Excellent customer service, interpersonal, financial, and leadership skills.
- Excellent analytical reasoning, problem solving, time management, and organizational skills.
- Excellent communication (verbal and written) skills.
- Ability to design data models to support reporting and analysis.
- Ability to provide technical leadership, coaching, and mentorship to project team members.
- Ability to maintain confidentiality.

Initial Effective Date: June 14, 2017
Latest Revision Date: