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# INFORMATION TECHNOLOGY BUSINESS/TECHNICAL ANALYST

Series Specification

Information Technology Business/Technical Analyst I Information Technology Business/Technical Analyst II Senior Information Technology Business/Technical Analyst

#### **DEFINITION**

This series specification describes three classes that have the primary responsibility for all of the functions associated with supporting and/or administering systems and programs, including the development of the future architecture of those systems and programs. The class is characterized by technical performance in the broadest and most complex areas; the highest level of system and organizational responsibility and provides technical or project leadership at the college-wide or district-wide level. Employees in this series may specialize primarily on Business Analyst, primarily on Technical Analyst, or a combination of both. Specific focus and assignments may vary from employee to employee.

#### **DISTINGUISHING CHARACTERISTICS**

<u>Information Technology</u> <u>Business/Technical Analyst I:</u> The Information Technology Business/Technical Analyst I is an experienced, senior-level technical or business specialist. Incumbent has primary responsibility for Business or Technical Analysis on multiple systems at the College-wide or District-wide level. The Information Technology Business/Technical Analyst I is primarily responsible for first line functional and/or technical support of designated business areas. The Information Technology Business/Technical Analyst I operates with routine oversight.

Information Technology Business/Technical Analyst II: The Information Technology Business/Technical Analyst II is an experienced Information Technology Business/Technical Analyst I, or equivalent who has primary responsibility for Business and/or Technical Analysis across several major systems and applications, and with complex integration responsibilities. The Information Technology Business/Technical Analyst II is distinguished from the Information Technology Business/Technical Analyst I by the amount of leadership exercised and the complexity and scope of work performed, and the exercise of significant autonomy in research and development of solution options. Information Technology Business/Technical Analyst II operates with moderate oversight.

Senior Information Technology Business/Technical Analyst: The Senior Information Technology Business/Technical Analyst is the lead position in this class and is a senior Business and/or Technical Analyst who performs the most complex activities within the scope of the Information Technology organization. Incumbent typically specializes in several overlapping technical areas and/or has broad overlapping architectural responsibilities and may lead multiple projects while also administering several production system components. The Senior Information Technology Business/Technical Analyst provides leadership for the coordination and development of technical documentation for existing, delivered and/or new system applications across functional domains and across multiple technical platforms. The Senior Information Technology Business/Technical Analyst operates with minimal oversight.

# **TYPICAL DUTIES**

# <u>Information Technology Business/Technical Analyst I:</u>

Operations (including security, performance, problem resolution, and budgets):

- Business Analyst Primary responsibility for business analysis at college-wide or district level.
- Technical Analyst Primary responsibility for analysis, development, and maintenance of technical applications that support college-wide or district-wide level functions. This includes but not limited to the ERM (enterprise resource management system ERM).
- Be able to research, set-up, and configure system functionality per existing, created, or delivered documentation on any system that supports the District.
- Primary focus to provide business analyst and/or technical analyst support for one or more similar systems or business areas (such as multiple modules in a functional domain and/or an interface that supports the primary focus).
- Secondary focus is assist in research, configuration, setup, and/or development of specific modules across functional domains and across multiple technical platforms.
- Business Analyst May maintain multiple functional applications and/or multiple servers for one or more similar systems and/or related functional area.
- Technical Analyst Performs installation and patching of software for development and production assigned systems.
- Technical Analyst Analyzes and resolves technical issues.
- Works with vendor to resolve problems.
- Provides vendor with enhancement requests.
- Creates scripted procedures and/or programming to automate support functions.
- Monitors performance, availability, and capacity of assigned functional applications.
- Performs analysis, application and migration of patches to the assigned functional applications, both in development and production.
- Maintains relevant technical documentation for District Information Technology.
- Conducts internal and external research to gather data and objectives/guidelines for organization-wide information systems.
- Conducts various types of analysis including alternative, business applications, cost benefit, data, feasibility, impact, technical and/or workflow processes.
- Advises on project and system feasibility.
- Monitors the service delivery of information systems and recommends needed changes or improvements.
- Conducts analysis using tools and techniques to address business application issues.
- Uses established industry methods and standards for conducting research, developing models, and performing statistical analysis.
- Develops business models.
- Designs and develops application.
- Supports development and production application environments per vendor standards.
- Analyzes, detects, and corrects technical problems and deficiencies.
- Supports production control and operational activities.
- Researches, identifies, and documents business and system requirements.
- Designs, codes, tests and implements pages and programs; creates timelines and documentation as needed.
- Translates and simplifies requirements for technical design.
- Creates functional requirements in use cases; coordinates requirements walk-through and sign-offs, verifies with user representatives/stakeholders that use cases and process models accurately portray specific business needs.
- Provides/develops technical documentation for existing and delivered system applications across functional domains.

#### Products:

- Participates in projects and provides task definitions and time estimates within assigned role.
- Performs project planning and management for small and medium sized projects and software patch cycles.
- Manages on-going priorities, schedules, and task completions.
- Provides development for multiple projects.

# Organizational Support and Leadership:

- Attends vendor training (off-site or web-based).
- Assists and provides coverage for other Information Technology staff in similar roles.
- Maintains knowledge and provides advice in the business areas supported.
- Evaluate potential software solutions, including off-the-shelf and open source components, and the system architecture to ensure that they meet business requirements.
- Leads functional business process re-engineering teams and continuous improvement efforts.
- Acts as liaison between Information Technology departments and customer business units.

### **Strategy:**

- Researches vendor sites for technical information/updates, new product updates, and future trends.
- Participates in long-range Information Technology planning and related cost analysis within assigned area.
- Following established plans, implements system architectures, policies, and procedures, additions, replacements, upgrades, or retirement of computer, network, database management or application systems.

Performs related duties as required.

<u>Information Technology Business/Technical Analyst II:</u> In addition to the typical duties of Information Technology Business/Technical Analyst I;

## Operations (including security, performance, problem resolution, and budgets):

- Maintains or administers software, across multiple major systems (different Operating Systems, different applications, integration between systems, etc.).
- Provides business analyst and/or technical analyst support for system applications across functional domains (examples of functional domains include but not limited to: HR, Financial and Campus Solutions/Student Administration) and across multiple technical platforms.
- Maintains and monitors performance, capacity, and availability of organization-wide business applications.
- Researches and develops non-standard or custom configuration/setup or system modifications to meet business requirements.
- Coordinates with Senior Information Technology Analysts on server updates.
- Performs major upgrades of software for development and production servers and software.
- Recommends changes for future consideration to improve application functionality, security, performance, capacity, and cost benefit.
- Designs, codes, tests and implements complex pages/panels and complex programs; creates timelines and documentation as needed.
- Provides/develops technical documentation for existing and delivered system applications across functional domains and across multiple technical platforms.

#### **Projects:**

Performs project planning and management for large-sized projects and software upgrades.

#### Organizational Support and Leadership:

- Assists and provides coverage for other Information Technology staff, sometimes in either technical or functional roles.
- Leads cross-functional business process re-engineering teams and continuous improvement efforts.

#### Strategy:

- Recommends changes to system architectures, policies, and procedures.
- Plans, designs, and implements additions, replacements, upgrades, or retirement of computer, network, database management or application systems.

Performs related duties as required.

<u>Senior Information Technology Business/Technical Analyst:</u> In addition to the typical duties of Information Technology Business/Technical Analyst I and II;

## Operations (including security, performance, problem resolution, and budgets):

- Integrates complex systems for inter-operability over multiple platforms and/or technologies.
- Performs capacity planning for District-wide applications.
- Consults with Information Technology staff and management to address adequate capacity, performance, and security for all or most District-wide servers and software.
- Recommends and implements Service Level Agreements (SLAs) to define agreement between Information Technology and business units or customers.
- Maintains knowledge of components outside of direct responsibilities and works with other Information Technology units (application and infrastructure) to design and maintain overall security of systems and data.
- Designs and implements Disaster Recovery and Business Continuity plans, consistent with Information Technology Management and Information Technology User community requirements.
- Provides leadership for the coordination and development of functional and technical documentation for existing, delivered and/or new applications across functional domains and/or multiple technical platforms.
- Has broad overlapping application and architectural responsibilities.
- Specializes in several overlapping technical areas.

# Projects:

- Performs project planning and management for major software upgrades and complex integration projects, involving large staffing, across multiple technical layers and technical units.
- Monitors all ongoing projects of technical staff in the unit, to ensure consistency with technical direction and procedures.

# Organizational Support and Leadership:

- Provides technical leadership to all Analyst I and II in the same unit.
- Recommends and justifies relevant Information Technology procedures and policies.
- Acts as a focal point for requests, problems, and issues affecting the unit.
- Leads cross-functional business process re-engineering teams and multi-technical specialty teams for projects and continuous improvement efforts.
- Leads evaluation of potential software solutions involving multiple Information Technology personnel, including off-the-shelf and open source components, and the system architecture to ensure that they meet business requirements.

#### Strategy

- Analyzes and justifies changes and improvements in applications, architecture, and configuration.
- Leads planning and cost analysis within assigned areas.

- Plans, designs and implements system architecture for broad, overlapping areas of technology.
- Participates in the development of and advises management on information technology strategy.

Performs related duties as required.

## **QUALIFICATIONS**

# **EDUCATION/EXPERIENCE**

<u>Information Technology Business/Technical Analyst I:</u> A Bachelor's degree in computer sciences, management information systems, engineering or closely related field and two years' experience directly related to the job duties; OR, a Bachelor's degree and four years' experience directly related to the job duties.

<u>Information Technology Business/Technical Analyst II:</u> A Bachelor's degree in computer sciences, management information systems, engineering or closely related field and four years' experience directly related to the job duties; OR, a Bachelor's degree and two years in class of Information Technology Analyst I; OR, a Bachelor's degree and six years' experience directly related to the job duties.

<u>Senior Information Technology Business/Technical Analyst:</u> A Bachelor's degree in computer sciences, management information systems, engineering or closely related field and six years' experience directly related to the job duties; OR, a Bachelor's degree and two years in class of Information Technology Analyst II; OR, a Bachelor's degree and eight years' experience directly related to the job duties.

#### **KNOWLEDGE OF**

Information Technology Business/Technical Analyst I, II and Senior Information Technology Business/Technical Analyst: Knowledge of enterprise resource management systems (currently PeopleSoft). Knowledge of business and instructional systems analysis; business and instructional planning processes; and statistical, cost benefit, impact, workflow, and data analysis. Knowledge of service administration practices and development of service level agreements; user acceptance testing; and creation and evaluation of Request for Bids. Knowledge of creation and presentation of information system service proposals; database organization and access methods; and programming languages, code development, and implementation. Knowledge of software systems development life cycle; computer operating systems, hardware, telecommunications, and network systems; LAN and Internet computing technologies; and business, administrative and instructional system applications. Knowledge of effective customer service; project management, procurement, and contract management; and information system problem management and change management. Knowledge of configuration and version control of information system components; system, user, and architecture documentation; and business recovery (disaster recovery). Knowledge of technical problem solving; methods of long-term strategic technical planning; and current industry information, vendor direction, new products and new technical architectures. Knowledge of multi-media presentation tools; software licensing, intellectual property rights, and copyright law; and business analyst functions.

<u>Senior Information Technology Analyst (Business/Technical):</u> Knowledge of management of enterprise-wide information system projects in a heterogeneous, multi-platform environment. Knowledge of team dynamics, team building, and workgroup interaction; effective leadership methods; organizational processes, practices and policies; team dynamics and team building methods. Knowledge of distributed printing subsystems; fault-tolerant, clustering, and replication; and storage area networks. Knowledge of

RAID and data archival subsystems; centralized backup and tape management systems; and centralized system monitoring and management systems.

# **SKILLS IN**

Skill in developing an image of how a system should work under ideal conditions; generating a number of different approaches to problems; determining the long-term outcomes of a change in operations; reorganizing information to get a better approach to problems or tasks; and evaluating the likely success of an idea in relation to the demands of the situation. Skill in understanding written sentences and paragraphs in work related documents; communicating effectively with others orally and in writing as indicated by the needs of the audience; finding ways to structure or classify multiple pieces of information; and listening to what other people are saying and asking questions as appropriate.

#### **ABILITY TO (ESSENTIAL FUNCTIONS)**

Information Technology Business/Technical Analyst I, II and Senior Information Technology Business/Technical Analyst: The ability to perform the Analyst I and Analyst II functions of the position; sustain regular work attendance; work cooperatively and effectively with the public, students, faculty, and staff; exercise initiative and mature judgment; work as a member of a team; and meet schedules and time lines. The ability to learn and adapt to new technologies, procedures, and policies; work independently with minimum supervision; and plan, organize, prioritize, and complete the workload of assigned areas of responsibility. The ability to perform individual research, analysis, and evaluation of systems and programs; develop and present technical briefings and specifications; and develop, coordinate, and enforce organization-wide information systems standards. The ability to collect and analyze data utilizing computer applications as appropriate; prepare written and verbal reports on findings; and read and understand programming languages used in the District. The ability to design, code, test, and debug programs; apply vendor supplied modifications and upgrades to software packages; and coordinate multiple versions of applications and in house modifications and vendor upgrades.

# **Senior Information Technology Business/Technical Analyst:**

The ability to perform the functions of the position series. The ability to develop, communicate, and meet schedules and time lines. The ability to learn and lead implementation efforts related to new technologies, procedures and policies; develop and maintain enterprise systems exhibiting high availability, good performance, and providing reliable information; and work independently with minimal supervision. The ability to assume accountability for all responsible systems and programs; and perform individual research, analysis, and evaluation of Information Technology systems, programs and services. The ability to plan, organize, and manage enterprise-wide systems standards; organize tasks and meetings, resulting in timely and effective completion of projects; and articulate business and systems requirements to management, experts, and vendors.

# **ALLOCATION FACTORS**

The amount of supervision exercised and received; the complexity and scope of work performed; breadth and scope of knowledge of college and District policies and procedures required; and the scope, level, and range of impact of decisions made.

#### **TYPICAL EQUIPMENT USED** (May include, but not limited to)

Current office technologies, including computers, scanners, printers, copiers, and servers.