INFORMATION TECHNOLOGY SPECIALIST 3

KIND OF WORK

Third-level professional work requiring specialized proficiency in information technology.

DEFINITIONS

Information Technology:
Information technology positions are those positions where the purpose of the job is planning, developing, operating, maintaining, and evaluating information systems.

Impact and Complexity:
The effect, combination, and result of work elements.

Some Consideration Factors:

- Consequence of Errors
- Management and Control
- Urgency
- System Availability
- Mission Criticality
- Data Connection/Interconnection
- Scope
- Depth
- System Capacity/Speed
- Customer Base
- Protocols/Languages
- Tasks-Routine/Non-Routine
- Real Time vs. Non-Real Time (service affecting vs. non-service affecting, on-line vs. off-line)

NATURE AND PURPOSE

Under limited supervision, employees at this level focus on analysis and design of systems. The work requires a number of years experience in a specific information technology area with increasing level of technical know how. The work requires a firm grasp of conceptual background in a specific area as well as knowledge of the practical applications. Knowledge of specific area of business or technology sufficiently to make recommendations about existing practices and procedures to take into account new technologies.

- **Know-How** -- requires thorough understanding of specific technology to complete major projects independently. Employees at this level have the capability to define what needs to be done rather than completing projects outlined for them. In addition, this is the level where employees must have knowledge of the business needs and use this information in making decisions on structure of systems and types of technology.

- **Problem-Solving** -- work requires technical analysis and design capabilities. Application of problem-solving requires knowledge of business functions and goals. Problem-solving may require solutions that span several platforms using several languages in the client server, multi-tier or multi server.
• **Accountability** -- employees are responsible for all facets of complex projects and/or for significant parts of large projects. Supervisors typically review accomplishments rather than work in progress and employees are expected to make most technical decisions independently. Project management requiring human relations skills (providing leadership to team) becomes an important area of accountability.

**Difference between “3” and lower level positions**

Unlike employees at lower levels, employees at this level are beginning to specialize in an area of technology and must be categorized in one of the five options. Employees are responsible for independently completing projects or significant parts of large projects. They define what needs to be done rather than complete projects that are outlined for them by others. This is the first level where employees are expected to understand the broad business needs of the department or organizational unit. Unlike lower levels, little work direction is given on technical aspects of the job. Less time is spent on coding and testing than at the lower levels and work may involve relational database systems. Participates in analyzing and designing systems, networks and applications rather than implementation only. Incumbents may provide leadwork to others, oversee systems or projects and participate in collaborative endeavors.

**EXAMPLES OF WORK** (A position may not include all the work examples given, nor does the list include all that may be assigned.)

- Examines the status and operation of existing systems and recommends or performs corrective measures.
- Coordinates work efforts so that standard methods and procedures are employed and time and cost commitments are achieved.
- Performs detailed analysis of modifications to existing systems.

**Allocation factors/differentiating work behaviors**

Critical allocation criteria will include one or more of the work behaviors:

- High level fault analysis which may include performance and capacity management.
- Manages the infrastructure (not the lead on infrastructure); has a variety of business applications and has to integrate local area network with wide area network.
- Acts as a high level technical resource.
- Completes or participates in preparation of cost benefit analyses.
- Participates in technical design on large systems.
• Knowledge of business functions and goals is used independently in design or administration of a system.

• Manage projects and/or significant parts of large projects.

• Analyzes and designs systems, networks and applications which may include planning and implementation.

• Utilizes relational databases (DB2, Oracle, Sybase) on one or more platforms.

**KNOWLEDGE, SKILLS AND ABILITIES REQUIRED** (in addition to those required at the lower level classes)

Knowledge of:

- Information systems analysis and design techniques.

- Considerable knowledge of the organization mission, goals, policies, and processes.

- Considerable knowledge of computer, telecommunications protocol and peripheral equipment capabilities.

- Working knowledge of the limits and uses of programming for particular machine applications.

Ability to:

- Write sufficient to provide clear objectives and supporting documentation.

- Present proposed/recommended objectives to management.

- Project future MIS needs, analyze/develop alternatives, and recommend action sufficient to provide technical assistance to management in the long-range planning process.

- Assess operations (equipment, staff, training, etc.) needs sufficient to establish priorities and develop budget recommendations.

- Understand, evaluate, assess and implement complex data processing systems, software and equipment sufficient to make recommendations for purchase and implementation.
Direct the work of other employees in the analysis of major and/or complex systems.

Est.: 10/96  T.C.:  
Rev.: 04/03  Former Title(s): 002189 Management Information Systems Coordinator  
003157 Information Systems Specialist 3  
001888 Programmer/Analyst  
000894 Systems Analyst  
003009 Facilities Information Center Coordinator  
003296 Finance Systems Specialist  
003180 Intertech Customer Representative  
002946 Economic Sec Information Center Specialist