**INFORMATION TECHNOLOGY CAREER LEVEL GUIDES**

**Sub Families**

Business Analysis

Applications Development

Quality Control & Quality Assurance

Project Management/Program Management

Systems Design, Implementation and Management

Network Design, Implementation and Management

Customer Support

Data Management

November 3, 2005

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| Job Family | Information Technology | | | | | |
| Job Sub-Family | Analyst | | | | | |
| Sub-Family Activities | Consults with internal customers of IT to capture business requirements and serve as an ongoing project and customer resource. Communicates on processes and their implications to technical and non-technical contributors to ensure that solutions accurately meet business users’ goals.  All positions in this job family participate to some degree in the following activities:  Consulting   * Facilitate process to establish and capture business requirements * Influence business partners and service providers ( e.g. regarding priorities, hardware/software selection, vendor selection)   Analysis   * Analyze marketplace, industry, company, technology trends and best practices, vendor products and services, etc. * Identify and document business strategies, objectives and drivers * Analyze and document business processes and metrics and identify improvement opportunities * Calculate/estimate costs/benefits of alternative actions or solutions to establish their viability/ROI * Re-engineer processes to deliver greater effectiveness and efficiency   Systems integration   * Identify/document how applications/systems interact to support business processes * Assess/apply/project impact of system changes on users and internal and external customers/stakeholders | | | | | |
| Career Level | LEVEL 1 Entry Exempt Contributor | LEVEL 2 Developing Exempt Contributor | LEVEL 3 Intermediate Exempt Contributor | LEVEL 4 Senior Exempt Contributor | LEVEL 5 Exempt Expert/Integrator | LEVEL 6 Exempt Strategic Technical Advisor |
| Job Titles | Associate IT Analyst | IT Analyst | Senior IT Analyst | IT Analyst Specialist | Senior IT Analyst Specialist | IT Strategist |
| Typical Roles and Responsibilities | 1. Prepares business requirements for specific functions or processes within a larger system under direction of an experienced Business Analyst 2. Uses basic analytical tools to analyze and streamline business processes 3. Assists with creating prototype designs for low-risk projects 4. Implements small (1-8 weeks) work order changes 5. Documents existing workflow/current business processes 6. Assists in completing service requests 7. Observes joint application development sessions | 1. Conducts business requirements reviews and independently formulates logical statements of business requirements 2. Creates prototype designs for medium-risk projects 3. Coordinates impact to vendor and workflow for an existing product 4. Independently completes service requests 5. Participates in joint application development sessions | 1. Identifies and specifies business requirements, resources and processes for a sub-system or major system modification 2. Uses advanced analytical tools to analyze and streamline business processes 3. Develops detailed selection evaluation criteria based on identified product requirements; assumes full accountability for developing business requirements for complex tasks 4. Creates prototype designs for significant-risk projects 5. Coordinates impact to vendor and workflow for a new product 6. Coordinates joint application development sessions | 1. Performs most complex systems process analysis, design, and simulation across multiple platforms and/or cross-functional business areas 2. Performs process improvement and re-engineering, with an understanding of technical problems and solutions as they relate to the current and future business environment 3. Demonstrates highest level understanding of business systems and industry requirements, and uses this knowledge to proactively identify opportunities and develop innovative solutions for complex processes in demanding business situations | 1. Provides strategic leadership and highest level technical expertise in implementing technical solutions to business problems 2. Designs and evaluates how future technology solutions affect current and future business strategies and practices | 1. Advises IT leadership and/or business executives as ’s highest level resource for applying information technology to delivering strategic business results   *Advancement to this level is a case-by-base determination by Executive Leadership, based upon a sustained track record of extraordinary contributions and/or industry and professional credentials* |
| **Functional/Technical Expertise: Requirements Analysis Methodologies**  *Demonstrates knowledge of business requirements analysis methodologies* | 1. Possesses professional training in business analysis methods and tools | 1. Demonstrates basic knowledge of methods and techniques used to complete requirements analyses | 1. Demonstrates proficiency in several methods and techniques used to complete business requirements analysis | 1. Demonstrates advanced knowledge of a wide range of methods and techniques used to complete business requirements analysis | 1. Demonstrates expert knowledge of methods and techniques used to complete requirements analyses by developing methodologies, techniques and standards for defining business requirements | 1. Demonstrates expert knowledge of methods and techniques used to complete requirements analyses by developing methodologies, techniques and standards for defining business requirements |
| **Functional/Technical Expertise: Requirements Analysis**  *Demonstrates ability to identify and analyze business needs and requirements* | 1. Possesses professional training in business requirements analysis | 1. Documents user requirements/ specifications and applies workflow analysis skills 2. Assists with the development of basic conceptual designs | 1. Demonstrates special knowledge focus in specific areas of the business function or application 2. Analyzes complex business processes for a single department and identifies related business requirements | 1. Demonstrates special knowledge focus in specific areas of the business function or application 2. Analyzes complex business processes spanning multiple departments and identifies related business requirements | 1. Partners with customers across to ensure that new business requirements support the strategic direction and will improve their business 2. Recommends enhancements in software functionality to users based on current knowledge of process and regulatory changes 3. Persuades users to adopt improvement ideas by delivering business cases for change | 1. Partners with customers across to ensure that new business requirements support the strategic direction and will improve their business 2. Recommends enhancements in software functionality to users based on current knowledge of process and regulatory changes 3. Persuades users to adopt improvement ideas by delivering business cases for change |
| **Functional/Technical Expertise: Functional Design**  *Demonstrates knowledge of functional design processes* | 1. Possesses professional training in IT design process | 1. Demonstrates basic knowledge of IT design principles, practices and theory | 1. Demonstrates advanced knowledge of IT design principles, practices and theory by providing guidance to others in functional design processes | 1. Demonstrates advanced knowledge of IT design principles, practices and theory by providing guidance to others in functional design processes | 1. Demonstrates advanced knowledge of IT design principles, practices and theory by overseeing the development of new IT design principles and practices for | 1. Demonstrates advanced knowledge of IT design principles, practices and theory by overseeing the development of new IT design principles and practices for |
| **Functional/Technical Expertise: Functional Design Development**  *Demonstrates ability to develop functional designs* | 1. Possesses professional training in IT design process | 1. Interprets user specifications to develop basic functional designs and identify potential issues and shortfalls | 1. Identifies risks and benefits of alternative designs 2. Develops complex functional designs | 1. Identifies risks and benefits of alternative designs 2. Develops complex functional designs | 1. Demonstrates expert understanding of potential functional design issues by suggesting alternatives 2. Assesses the organizational and customer implications of new functional designs to ensure consistency with the development strategy 3. Develops long-term strategy for functional design initiatives 4. Leads others in the functional design process | 1. Demonstrates expert understanding of potential functional design issues by suggesting alternatives 2. Assesses the organizational and customer implications of new functional designs to ensure consistency with the development strategy 3. Develops long-term strategy for functional design initiatives 4. Leads others in the functional design process |

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| Job Family | Information Technology | | | | | |
| Job Sub-Family | Application Development | | | | | |
| Sub-Family Activities | Develops, tests, debugs, maintains and documents information systems applications. Installs/modifies purchased solutions.  All positions in this job family participate to some degree in the following activities:  Programming (in one or more environments, e.g., mainframe, server, client/desktop, internet)   * Apply standard methodologies in creating and maintaining applications * Develop and code from specifications * Maintain existing programs * Create new programs and application systems * Create program and system documentation   Analysis   * Gather business requirements * Identify functionality of planned, existing, or purchased systems and map to business requirements; create specifications   Quality Control/Quality Assurance   * Apply programming and testing techniques and tools such as structured programming, code walk-throughs and audits, program testing and debugging   Systems Integration   * Specify how new application functional objects integrate with existing application components * Identify and define application integration points with other internal and external systems * Collaborate with resources who represent other systems/subsystems when planning changes or debugging problems | | | | | |
| Career Level | LEVEL 1 Entry Exempt Contributor | LEVEL 2 Developing Exempt Contributor | LEVEL 3 Intermediate Exempt Contributor | LEVEL 4 Senior Exempt Contributor | LEVEL 5 Expert/Integrator | LEVEL 6 Strategic Technical Advisor |
| Job Titles | Associate IT Analyst – Applications Development | IT Analyst – Applications Development | Senior IT Analyst – Applications Development | IT Specialist – Applications Development | Senior IT Specialist – Applications | IT Strategist |
| Typical Roles and Responsibilities | 1. Works on small and/or low risk tasks or projects 2. Assists or performs clearly defined tasks under supervision 3. Demonstrates understanding of problem escalation procedures 4. Demonstrates awareness of functional, technical, and/or end-user documentation standards 5. Assists in creating functional, technical, and/or end-user documentation 6. Demonstrates ability to learn and apply basic features and functions of systems, processes, technology standards, and methodologies relevant to day-to-day responsibilities 7. Possesses professional training in information technology, usually gained through a directly related undergraduate degree, or the equivalent practical experience 8. Organizes own work effectively and efficiently 9. Primary work focus is on specific, assigned tasks | 1. Executes complete life cycle for simple to moderately complex application components based on design specifications; adheres to defined programming standards and structured coding techniques 2. Performs routine/simple maintenance, problem resolution and enhancements to software applications 3. Prepares detailed specifications from which programs will be written; designs, codes, tests, debugs, documents and maintains those programs 4. Analyzes and revises existing system logic difficulties; assists in development and documentation of user manuals 5. Makes suggestions for problem solutions or software enhancements; partners with business process experts to learn and understand problems with software | 1. Executes complete life cycle for complex application components based on functional requirements; considers computer equipment capacity and limitations, operating time and form of desired results 2. Performs moderately complex maintenance and problem resolution of software applications 3. Identifies opportunities for improving software by partnering with customers; evaluates new and existing software products 4. Develops detailed module technical specification for application components 5. Maintains full technical knowledge of applications development tools and methods within a particular platform or technology; instructs and guides others, oftentimes providing peer review to ensure quality assurance | 1. Demonstrates expert knowledge of technical design alternatives and the implementation implications 2. Manages complete life cycle for most complex or high-risk components 3. Develops and implements maintenance plans to address technical and business issues; performing maintenance and urgent problem resolution on software applications 4. Analyzes functional design/overall application technical design and develops detailed module technical application for complex components 5. Maintains responsibility for applications dealing with the overall operating system, such as sophisticated file maintenance routines, large telecommunications networks, computer accounting and advanced mathematical/ scientific software packages 6. If not in a leadership role, recognized as a technical expert in a single platform by peers in one or more departments | 1. Provides strategic leadership and highest level technical expertise for specific applications, databases, technologies, platforms or methodologies 2. Assesses the business and organizational implications of key application technology alternatives for wide-impact initiatives; recommends appropriate action 3. Guides the development team in overall application technology design activities; leads the identification and definition of key architectures, components and interfaces, design of data model and data/information flows 4. Designs most complex application interfaces and integration: manages issue identification and problem resolution process; addresses problems of systems integration, compatibility and multiple platforms 5. Collaborates with customers to create product enhancements or new product development alternatives 6. Achieves diverse technical experiences related to studying and analyzing systems needs, systems development and systems process analysis, design, and re-engineering   **Variation 5A:**  ***EXPERTS***   1. Highest level resource for resolution of most-complex, unique technical application development issues encompassing multiple platforms 2. Leads or participates on teams of highly specialized IT professionals 3. Credible expert advisor on highly specialized topics to peers and IT senior management 4. Creates improved materials, tools, work aids, and processes related to applications development/ systems integration   **Variation 5B:** ***INTEGRATORS***   1. Combine broad IT expertise with deep business knowledge to create technology solutions to the most important, complex, or risky business situations 2. Leads or collaborates with other highest level IT professionals, business strategists, specialized technicians, business process experts, vendors, consultants and/or customers 3. Solves most-complex, unique problems that have direct and important impact on strategic IT priorities and/or measurable business results 4. Credible expert advisor to peers and internal/external customers; trusted advisor to line management 5. Champions innovations from conception through development to implementation | 1. Creates integrated, multi-disciplinary IT solutions for enterprise-level or strategic business problems or opportunities 2. Evaluates competitor or emerging technologies to inform technology designs that create competitive advantage for 3. Advises executive management on use of current and future technology for optimal impact on current and future business strategies and results 4. Primary influence for purchases, investments or deployment of IT resources that have sufficient impact on operations or services to measurably increase or decrease long-term company performance and shareholder value 5. Primary responsibility for creating or expanding relationship with major vendors, suppliers, regulators, or other critical external organizations 6. Primary work focus is enterprise architecture   *Advancement to this level is a case-by-base determination by Executive Leadership, based upon a sustained track record of extraordinary contributions and/or industry and professional credentials* |
| **Functional/Technical Expertise: Application Development Process**  *Demonstrates knowledge of application development environments and tools* | 1. Demonstrates basic knowledge of an application development environment and tools | 1. Demonstrates proficiency with an application development environment and set of tools | 1. Demonstrates complete, seasoned understanding of an application development environment, tools and methodologies for a single platform | 1. Demonstrates advanced knowledge of application development environments, tools and methodologies across multiple platforms by suggesting improvements to methodologies or by leading teams working on improvements | 1. Demonstrates expert knowledge of application development environments, tools and methodologies for multiple platforms by evaluating and selecting software development tools for a given application 2. Sets strategic direction of application development environment and tools across multiple departments | 1. Demonstrates expert knowledge of multiple application development environments, tools and methodologies by evaluating and selecting software development tools for a given application 2. Sets strategic direction of application development environment and tools across |
| **Functional/Technical Expertise: Technical Design Development**  *Demonstrates ability to design and develop technical designs* |  | 1. Develops detailed module technical specifications for basic to moderately complex application components | 1. Analyzes functional design/overall application technical design and develops detailed module technical specifications for complex components 2. Designs small systems | 1. Analyzes functional design/overall application technical design and develops detailed module technical specifications for complex components 2. Designs medium or large systems 3. Advises others on design issues | 1. Demonstrates expert knowledge of technical design alternatives and their implications by guiding the development team in overall application technical design activities 2. Leads the identification and definition of key architectures, components and interfaces, design of data model (entity relationships) and data/information flows 3. Assesses the business and organizational implications of key application technology alternatives for wide-impact initiatives to recommend appropriate strategic action 4. Creates reference system designs or architectures for use by a development team or organization | 1. Demonstrates expert knowledge of technical design alternatives and their implications by guiding the development team in overall application technical design activities 2. Leads the identification and definition of key architectures, components and interfaces, design of data model (entity relationships) and data/information flows 3. Assesses the business and organizational implications of key application technology alternatives for wide-impact initiatives to recommend appropriate strategic action 4. Sets design directions across |
| **Functional/Technical Expertise: Application Development**  *Demonstrates ability to develop and enhance software applications and related components* | 1. Codes simple application components (<100 hours) based on design specifications, while adhering to defined programming standards, structured coding techniques and development methodologies | 1. Codes moderately complex application components involving multiple programs (100-1,000 hours) based on design specifications, while adhering to defined programming standards, structured coding techniques and development methodologies 2. Develops design specifications for self based on functional requirements | 1. Codes complex application components (>1,000 hours) 2. Develops design specifications for other developers 3. Conducts code reviews, performs analysis of system changes and identifies appropriate issues | 1. Codes complex application components (>1,000 hours) 2. Ensures others adhere to defined programming standards, structured coding techniques and development methodologies 3. Provides direction for addressing development issues | 1. Develops long-term direction for application development initiatives for single or multiple departments 2. Collaborates with customers to review product enhancements or new company product development alternatives 3. Defines, monitors and coaches others in application development activities 4. May code very complex or high risk components | 1. Develops long-term direction for application development initiatives across |
| **Functional/Technical Expertise: Application Maintenance**  *Demonstrates ability to maintain software applications and related components* | 1. Performs simple maintenance and problem resolution within an application | 1. Performs moderately complex maintenance and problem resolution within an application | 1. Performs complex and urgent maintenance and problem resolution on software applications involving multiple applications and interfaces 2. Identifies opportunities for improving application functionality and performance issues by working with customers and architecture resources 3. Manages issue identification and problem resolution process | 1. Performs complex and urgent maintenance and problem resolution on software applications involving multiple applications, platforms and interfaces 2. Identifies opportunities for improving application functionality and performance issues by working with customers and architecture resources 3. Manages issue identification and problem resolution process 4. Ensures maintenance changes work together across a single system or multiple systems and are aligned with strategic direction | 1. Determines organizational impact of software maintenance issues and develops overall strategy to address them | 1. Determines organizational impact of software maintenance issues and develops overall strategy to address them |

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| Job Family | Information Technology | | | | | |
| Job Sub-Family | Quality Control & Quality Assurance | | | | | |
| Sub-Family Activities | Manages the execution of defined methods, procedures and standards to analyze, measure, and report on the success of completed products from each phase of the development lifecycle against defined product quality standards to ensure end products meet requirements and are fit for use.  All positions in this job family participate to some degree in the following activities:   * Designing, implementing, coordinating and maintaining a test environment including data customization (ageing, creation, manipulation, extraction, etc) * Developing and implementing conversion and version control strategies and protocols * Selection and application of appropriate tools to manage test processes, validate results, and perform various levels of testing appropriate to the environment * Creating, managing, monitoring, communicating and ensuring compliance to service level agreements * Using statistical tools and methods to identify, measure, and track performance and defects * Developing test deliverables as related to the five areas of Quality Control (Test Planning, Test Preparation, Test Execution, Defect Management and Test Reporting), including building definitions, specification/requirement decomposition, and requirement matrices * Developing test cases, conditions, checklists, decision tables, systems controls, and auditability checks * Managing/facilitating the test process, including structuring, facilitating, or participating in reviews, walk-throughs, inspections; obtaining and documenting approvals; developing, documenting, and communicating test processes, requirements, procedures, results, and standards. | | | | | |
| Career Level | LEVEL 1 Entry Exempt Contributor | LEVEL 2 Developing Exempt Contributor | LEVEL 3 Intermediate Exempt Contributor | LEVEL 4 Senior Exempt Contributor | LEVEL 5 Expert/Integrator | LEVEL 6 Strategic Technical Advisor |
| Job Titles | Associate IT Analyst - Quality | IT Analyst – Quality | Senior IT Analyst – Quality | IT Specialist – Quality | Senior IT Specialist – Quality | IT Strategist |
| Typical Roles and Responsibilities | 1. Executes existing test plans and reports results to ensure quality of components and work products 2. Generates test data for defined test cases 3. Attends and participates in requirements and test plan reviews 4. Updates existing test plans and test cases to reflect new requirements 5. Provides timeline information about quality control tasks and participation for small, focused projects under guidance to ensure timely project delivery 6. Maintains existing test processes and documentation to ensure adequate record keeping and knowledge sharing | 1. Generates test data and recognizes test environment preparation needs 2. Attends and participates in project-level reviews, walkthroughs and inspections 3. Conducts test reviews, including test plans, requirements, cases and automation 4. Provides and meets quality control/ quality assurance timeline information on a project level 5. Develops & executes test plans for a single department 6. Provides and collects quality metric data for project 7. Communicates quality assurance /quality control process on a project to all team members 8. Identifies automation opportunities | 1. Supports development and adoption of enterprise quality standards, processes, tools and methodologies to ensure cost efficient, timely and effective services that support the corporate business strategy 2. Communicates regularly with business and development teams to define test plans, schedules, processes and cases 3. Develops & executes complex test plans (e.g. across departments involving 5+ Quality Assurance Analysts, new technology, >$200k projects ) 4. Translates system requirements and specifications into test requirements to ensure adequate test case coverage 5. Develops tools and/or processes or implements purchased tools and/or defined methodologies to increase testing capability and throughput 6. May guide and develop automation strategy for projects 7. Provides budget and timeline information about quality assurance/quality control tasks and participation for complex projects | 1. Primary input to development and implementation of enterprise quality assurance standards, processes, tools and methodologies to ensure cost efficient, timely and effective services that support the corporate business strategy 2. Communicates regularly with upper level management to assess the status of the quality assurance/quality control environment and define steps for improvement 3. Recommend tailoring of IT development processes for projects 4. Communicates quality assurance strategy 5. Provides budget and timeline information about quality assurance/quality control tasks and participation for large, enterprise projects | 1. Provides strategic leadership and highest level technical expertise for specific applications, databases, technologies, platforms or methodologies 2. Evaluates how future technology solutions and methodologies affect current and future business strategies and practices 3. Pioneers, owns, leads, and provides technical expertise with multiple technologies that span lines of business and affect software, data, network/ communication, and computing platform technologies 4. Recommends improvements to IT development processes | 1. Advises IT leadership and/or business executives as ’s highest level resource for applying information technology to delivering strategic business results   *Advancement to this level is a case-by-base determination by Executive Leadership, based upon a sustained track record of extraordinary contributions and/or industry and professional credentials* |
| **Functional/Technical Expertise: Quality Assurance Standards**  *Demonstrates knowledge of quality control and quality assurance standards* | 1. Demonstrates basic knowledge of quality control standards, methodologies and processes | 1. Demonstrates proficiency in quality control and quality assurance standards, methodologies and processes | 1. Demonstrates advanced knowledge of quality control and quality assurance standards, methodologies and processes by providing guidance to others in quality control and quality assurance processes | 1. Demonstrates advanced knowledge of quality control and quality assurance standards, methodologies and processes by providing guidance to others in quality control and quality assurance processes | 1. Demonstrates expert knowledge of quality standards by monitoring adherence to quality methodologies and suggesting improvements 2. Develops and promotes company-wide quality standards to meet organizational and customer needs | 1. Demonstrates expert knowledge of quality standards by monitoring adherence to quality methodologies and suggesting improvements 2. Develops and promotes company-wide quality standards to meet organizational and customer needs |
| **Functional/Technical Expertise: Quality Assurance Tools**  *Demonstrates knowledge of quality control and quality assurance tools* | 1. Demonstrates basic knowledge of quality control including testing and debugging tools | 1. Demonstrates proficiency in quality control including testing and debugging tools | 1. Demonstrates advanced knowledge of quality control and quality assurance by recommending changes to testing and debugging tools and other quality control and quality assurance processes | 1. Demonstrates advanced knowledge of quality control and quality assurance by recommending changes to testing and debugging tools and other quality control and quality assurance processes | 1. Demonstrates expert knowledge of quality control and quality assurance methods and tools by developing and promoting company-wide quality control and quality assurance processes | 1. Demonstrates expert knowledge of quality control and quality assurance methods and tools by developing and promoting company-wide quality control and quality assurance processes |
| **Functional/Technical Expertise: Software Risk Analysis**  *Demonstrates ability to identify and mitigate software risks* | 1. At a basic level, identifies risk implications of an application/ component | 1. Identifies risk implications of moderately complex applications/ components | 1. Evaluates requirements and functional and technical designs of complex applications to identify and analyze potential risks early in the development cycle | 1. Evaluates requirements and functional and technical designs of highest-complexity applications to identify and analyze potential risks early in the development cycle | 1. Defines methods to eliminate or mitigate software risks 2. Identifies overall business and technology risks to customer and through all phases of development | 1. Defines methods to eliminate or mitigate software risks 2. Identifies overall business and technology risks to customer and through all phases of development |
| **Functional/Technical Expertise: Quality Assurance Planning**  *Demonstrates ability to plan quality assurance and quality control processes* | 1. Develops basic testing plans/scripts including conditions, expected results and test data based on knowledge of quality control standards | 1. Develops moderately complex testing plans/scripts including conditions, expected results and test data based on knowledge of quality control standards | 1. Develops complex testing plans/scripts including conditions, expected results and test data based on knowledge of quality control and quality assurance standards | 1. Develops testing plans/scripts of highest complexity, including conditions, expected results and test data based on knowledge of quality control and quality assurance standards | 1. Develops performance measures, test plans, quality assurance methodology and product release criteria based on user requirements 2. Collaborates with customers and developers to define quality assurance strategies for large scale, high-impact development efforts | 1. Develops performance measures, test plans, quality assurance methodology and product release criteria based on user requirements 2. Collaborates with customers and developers to define quality assurance strategies for large scale, high-impact development efforts |
| **Functional/Technical Expertise: Quality Assurance Execution**  *Demonstrates ability to perform quality control and quality assurance processes, including the ability to troubleshoot, test, verify and validate all aspects of applications prior to customer rollout* | 1. Demonstrates basic knowledge in performing quality control and quality assurance procedures by executing basic test plans/scripts and clearly identifying all issues surfaced | 1. Demonstrates proficiency in performing quality control and quality assurance procedures by executing moderately complex test plans/scripts and clearly identifying all issues surfaced | 1. Demonstrates advanced knowledge in performing quality control and quality assurance procedures by executing complex test plans/scripts and clearly identifying all issues surfaced 2. Analyzes and manages reported issues through to resolution 3. Troubleshoots complex quality control and quality assurance issues | 1. Demonstrates advanced knowledge in performing quality control and quality assurance procedures by executing test plans/scripts of highest complexity and clearly identifying all issues surfaced 2. Analyzes and manages reported issues through to resolution 3. Troubleshoots quality control and quality assurance issues of highest complexity | 1. Leads others in performing quality assurance processes 2. Sets quality assurance objectives and desired outcomes and develops strategies and processes to achieve those outcomes 3. Implements quality assurance strategies and processes corresponding to the needs of the system or project | 1. Leads others in performing quality assurance processes 2. Sets quality assurance objectives and desired outcomes and develops strategies and processes to achieve those outcomes 3. Implements quality assurance strategies and processes corresponding to the needs of the system or project |

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| Job Family | Information Technology | | | | | |
| Job Sub-Family | Project Management/Program Management | | | | | |
| Sub-Family Activities | Manage the overall coordination, status reporting and stability of project-oriented work efforts, ensuring that project goals and objectives are met within agreed upon time, scope and resource requirements. | | | | | |
| Career Level | LEVEL 1 Entry Exempt Contributor | LEVEL 2 Developing Exempt Contributor | LEVEL 3 Intermediate Exempt Contributor | LEVEL 4 Senior Exempt Contributor | LEVEL 5 Exempt Expert/Integrator | LEVEL 6 Exempt Strategic Technical Advisor |
| Job Titles |  | Project Coordinator | Project Manager | Senior Project Manager | Program Manager | Program Director |
| Typical Roles and Responsibilities |  | 1. Provides project management support during project planning and execution. 2. Helps to define tasks and creates project schedule, team work plans and other project documents. 3. Identifies issues affecting work progress and recommends solutions. 4. Communicates schedule variances & potential scope changes in status reports 5. Performs cost/benefit analysis and other analysis for project or program | 1. Manages all aspects of intermediate projects throughout the project lifecycle including project scope, schedule, resources, quality, costs and change. Intermediate projects are those with multiple customers, a moderate project team (possible in multiple locations), taking place across multiple departments or functions, involving moderately complex technology and vendors or implementation partners 2. Translates project requirements into project objectives and tasks, managing task assignment to project resources and reporting on and managing project scope throughout the project lifecycle 3. Develops detailed project schedules, project estimates, resource plans, and status reports 4. Defines, assembles, and manages project team to ensure project objectives are met 5. Manages and contributes to the effectiveness of a team that integrates multiple functions/ disciplines (matrix organization) 6. Manages team direction and project outcome 7. Sets and manages client expectations, managing and escalating issues and changes when appropriate 8. Interfaces with all areas affected by the project, including end users, services organizations, vendors and implementation partners 9. Conducts project meetings and is responsible for tracking and analysis of all project aspects 10. Measures progress toward goals & revises project objectives and documents applying change control procedures 11. Reviews project deliverables for accuracy and provides assistance and mentoring to others 12. Proactively apprises management of issues effecting project status and offers solutions to solve the issues 13. Identifies complex problems with multiple variables & risks 14. Generates alternatives and implements solutions with assistance | 1. May lead multiple large unrelated projects or one very large project. Large projects are those with multiple customers, large project teams (usually in multiple locations), operating an enterprise-wide basis and involving multiple business units as well as IT departments; involving complex and interconnected technology and one or more vendors or implementation partners 2. Assists in project selection 3. Ensures goals & objectives of projects are being met 4. Assembles multiple interdepartmental and cross-functional project teams 5. Anticipates & prevents problems 6. Generate alternatives and implements solutions 7. Understands priorities in task execution/problem solutions 8. Provides customer satisfaction leadership, tracking and reporting for department 9. Anticipates how project team decisions impact the customer 10. Establishes and maintains quality and performance standards and measurements 11. Facilitates team meetings to ensure effective business decisions are reached; uses knowledge of team dynamics | 1. Manages or consults on multiple large projects constituting a program to achieve specific business goals or objectives; works in a coordinated manner to ensure proper allocation of resources, individual project profitability and high client satisfaction 2. Accountable for delivering business results on corporate initiatives 3. Translates program requirements into individual project objectives 4. Tracks/reports progress of multiple projects 5. Influences team direction & results both internally and with the client base 6. Identifies opportunities for cross-competency area participation & contacts appropriate personnel 7. Determines competency area staffing mix to ensure best results 8. Balances resources, schedules & financial factors while solving complex problems with multi-discipline approach 9. Generates alternatives & implements creative solutions 10. Understands priorities in task execution/problem solutions 11. Provides customer satisfaction leadership for division 12. Works directly with the customer base to understand the level of support the team provides 13. Develops methods to measure customer satisfaction 14. Facilitates complex team meetings involving business and IT resources. Demonstrates credibility as a business partner to ensure business and technology decisions are reached to support business goals and objectives | 1. Advises IT leadership and/or business executives as ’s highest level resource for applying information technology to delivering strategic business results 2. May personally manage largest, most complex, most strategically important projects, e.g., comprehensive ERP implementation, data warehousing or CRM initiative, etc. 3. Creates and maintains corporate project management process 4. Sets corporate project management standards 5. Establishes and achieves strategic goals which have significant business impact 6. Establishes customer satisfaction process for 7. Responsible and accountable for overall customer satisfaction   *Advancement to this level is a case-by-base determination by Executive Leadership, based upon a sustained track record of extraordinary contributions and/or industry and professional credentials* |
| **Functional/Technical Expertise: Project Management Tools, Templates and Methodologies**  *Demonstrates knowledge of project management tools, templates and methodologies* |  | 1. Demonstrates basic understanding of project management processes by using corporate-supplied project management tools and templates 2. Knows and uses project management and development methodologies as appropriate to the project | 1. Demonstrates basic understanding of project management processes by using corporate-supplied project management tools and templates 2. Knows and uses project management and development methodologies as appropriate to the project | 1. Demonstrates advanced understanding of project management processes by training others on project management tool and template usage 2. Knows and uses project management and development methodologies as appropriate to the project | 1. Demonstrates expert understanding of project management processes by setting direction for project management tools and templates 2. Uses portfolio management tools on a department level 3. Guides others in the use of project management and development methodologies | 1. Demonstrates expert understanding of project management processes by setting standards for project management tools and templates on a company-wide basis and by developing new program management and project management processes 2. Uses and manages portfolio management tools company-wide 3. Provides project management and development methodologies |
| **Functional/Technical Expertise: Project Estimation**  *Demonstrates ability to identify and estimate project requirements* |  | 1. Provides project-level estimates with assistance | 1. Develops detailed project schedules, project estimates, resource plans, and status reports | 1. Provides estimates and estimation standards on a single complex project or on multiple unrelated intermediate projects | 1. Provides direction in project selection for multiple related projects using estimations 2. Sets estimation standards for a department or multiple departments | 1. Provides estimation tools and training 2. Maintains estimation database 3. Establishes standards and process for scope creation |
| **Functional/Technical Expertise: Project Communication**  *Demonstrates ability to communicate project status and implications to stakeholders* |  | 1. Interfaces with internal project team members and management teams 2. Communicates project implications internally 3. Communicates and presents project status to project team, management, and customer with assistance 4. Completes templates to standards with assistance 5. Prepares written status reports for client review with assistance 6. Fosters open communication 7. Demonstrates strong listening skills | 1. Interfaces with both internal and external project team members and management teams 2. Clearly and broadly communicates project implications both internally and externally 3. Clearly communicates and presents project status to project team, management, and customer 4. Completes templates to standards 5. Prepares written status reports for client review 6. Fosters open communication 7. Demonstrates strong listening skills | 1. Interfaces with both internal and external project team members and management teams 2. Mentors others and trains project teams in application of project processes 3. Facilitates communication which maintains clear and concise project deliverables and receivables 4. Ensures the timely flow of information to the appropriate client/team 5. Prepares status reports for department 6. Fosters open communication | 1. Interfaces with both internal and external project team members and management teams 2. Mentors and coaches others in application of project processes and methodologies 3. Discusses and presents business information to senior management 4. Provides communication direction for division 5. Assists with template content and standards | 1. Interfaces with both internal and external project team members and management teams 2. Develops communication classes and processes 3. Develops written procedures that have broad business impact 4. Develops process, standards, and templates for 5. Has the ability to change the thinking of or gain the acceptance of others in sensitive situations |
| **Functional/Technical Expertise: Project Management Discipline**  *Demonstrates knowledge of the principles and techniques of the project management discipline* |  | 1. Demonstrates fundamental awareness of the elements of the project management discipline:  * Integration * Scope * Time * Cost * Quality * Human Resources * Communications * Risk Management * Procurement | 1. Knows and applies the elements of the project management discipline at a level of rigor appropriate to the project: and the environment  * Integration * Scope * Time * Cost * Quality * Human Resources * Communications * Risk Management * Procurement | 1. Knows and applies the elements of the project management discipline at a level of rigor appropriate to the project: and the environment  * Integration * Scope * Time * Cost * Quality * Human Resources * Communications * Risk Management * Procurement | 1. Guides others in the use of the elements of the project management discipline:  * Integration * Scope * Time * Cost * Quality * Human Resources * Communications * Risk Management * Procurement | 1. Guides others in the use of the elements of the project management discipline:  * Integration * Scope * Time * Cost * Quality * Human Resources * Communications * Risk Management * Procurement |

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| Job Family | Information Technology | | | | | |
| Job Sub-Family | Systems Design, Implementation and Management | | | | | |
| Sub-Family Activities | Manages infrastructure related to servers, operating systems and applications to ensure availability, recoverability, performance, integrity and supportability through production support and maintenance of existing systems and development and implementation of systems enhancements. Areas of expertise or focus include server, mainframe or client technologies, systems software, or IT processes such as security or disaster recovery.  Positions in this job family participate to some degree in the following activities (degree of involvement depends on career level and technology / platform supported):   * Production Support – monitoring, troubleshooting, configuring, enhancing and providing advanced customer support * Deployment/Implementation – planning and executing the implementation of new applications or changes or enhancements to existing applications * Design – researching, recommending and designing new technologies, new configurations and enhancements to existing systems. Providing consulting advice to customers on the capabilities of the systems and applications environment * Systems Integration – analyzing and communicating potential impact of software changes across multiple systems / platforms / applications * Product Evaluation and Selection – obtaining, prioritizing, and documenting systems requirements from multiple constituents on an enterprise scale; researching appropriate hardware or software that meets requirements, including objective evaluation and testing to validate vendor claims and project performance * Vendor Management – Creating RFIs and RFPs; establishing mutually beneficial relationships with vendors; negotiating/maintaining contracts at the enterprise level | | | | | |
| Career Level | LEVEL 1 Entry Exempt Contributor | LEVEL 2 Developing Exempt Contributor | LEVEL 3 Intermediate Exempt Contributor | LEVEL 4 Senior Exempt Contributor | LEVEL 5 Expert / Integrator | LEVEL 6 Strategic Technical Advisor |
| Job Titles | Associate IT Analyst – Systems | IT Analyst – Systems | Senior IT Analyst – Systems | IT Specialist – Systems | Senior IT Specialist – Systems | IT Strategist |
| Typical Roles and Responsibilities | 1. Assists in testing, adjusting and troubleshooting systems as requested 2. Utilizes software and hardware tools to identify and diagnose problems and factors affecting systems performance 3. Configures and administers systems, including production servers, backups, and storage units 4. Supports implementation / deployment of new systems | 1. Provides tactical troubleshooting of systems problems with support of senior technicians 2. Provides ongoing operation/support of enterprise-wide applications, databases, policies and technology in the server, client and mainframe systems environment 3. Procures, configures, deploys and maintains infrastructure; interfaces with vendors as needed 4. Monitors systems performance and capacity and advises higher level technicians / supervisor of system status 5. Participates in planning and execution of new systems implementation / deployment 6. Assists in the installation, customization and maintenance of new systems or software products | 1. Troubleshoots moderately complex systems problems independently by investigating underlying problems 2. Advises developers in design of new applications by providing expertise on systems capabilities and constraints 3. Assures external security; may consult on corporate security policy 4. Provides cost / benefit analysis on intermediate projects 5. Participates in evaluation of vendor proposals 6. Conducts systems studies and performance analyses and recommends changes 7. May function in a lead capacity within department and represent department in workflow, escalation discussions with others 8. Leads implementation and deployment on intermediate projects 9. Installs, customizes and maintains moderately complex systems, software products or performance tools 10. Develops procedures and conducts training | 1. Provides highest level troubleshooting on unique problems unanswered at lower levels 2. Serves as highest level technical resource for a technology, policy, enterprise-wide application, operating system or software product 3. Serves as an expert consultant to developers and customers to provide expertise on system and / or software product capabilities and constraints 4. Works outside immediate discipline to coordinate a group of people in troubleshooting a wide-scale problem; serves as point-of-contact across several areas or disciplines to solve major systems outages with high impact or visibility 5. Provides expert technical advice and counsel to management and to less experienced systems analysts 6. Evaluates, recommends and selects appropriate hardware, software and platforms for systems infrastructure 7. Recommends systems integration required to support business applications needs 8. Performs cost/benefit analysis on more complex projects 9. Performs lead role in reviewing vendor proposals and making recommendations 10. Leads the most complex implementation and deployment efforts on large projects 11. Mentors less experienced employees 12. Designs and leads implementation of hardware / software / environment standards based on business strategy and architecture 13. Installs, customizes and maintains highly complex systems, products or performance tools 14. Monitors standards and procedures; may conduct training 15. Undertakes the most complex capacity planning, analysis and engineering design changes | 1. Provides strategic leadership and highest level technical expertise for specific applications, databases, technologies, platforms, policies or methodologies 2. Evaluates how future technology solutions affect current and future business strategies and practices 3. Pioneers, owns, leads, and provides technical expertise with multiple technologies that span lines of business and affect software, data, network / communication, and computing platform technologies OR as the deepest expert on multiple system technologies | 1. Advises IT leadership and/or business executives as ’s highest level resource for applying information technology to delivering strategic business results   *Advancement to this level is a case-by-base determination by Executive Leadership, based upon a sustained track record of extraordinary contributions and/or industry and professional credentials* |
| **Functional/Technical Expertise**: Systems Management  *Demonstrates ability to design and install enterprise server configurations and provide maintenance to ensure the integrity of the operations environment (e.g. monitor performance, predict requirements, implement changes).* | 1. Develops and executes standard, routine portions of the change implementation plan 2. Demonstrates basic knowledge of current and planned server service levels and is able to identify signs of server performance degradation 3. Resolves and documents basic operation problems 4. Demonstrates basic understanding of server systems and utilities 5. Demonstrates basic knowledge of disaster recovery procedures and assists in disaster recovery testing | 1. Develops and executes standard, routine portions of the change implementation plan 2. Demonstrates basic knowledge of current and planned server service levels and is able to identify signs of server performance degradation 3. Resolves and documents basic operation problems 4. Demonstrates basic understanding of server systems and utilities 5. Demonstrates basic knowledge of disaster recovery procedures and assists in disaster recovery testing | 1. Develops and executes portions of complex change implementation plans 2. Projects performance and capacity using available tools 3. Identifies, determines the cause of, and corrects instances of server performance degradation 4. Resolves moderately complex operational problems by determining root cause 5. Demonstrates advanced understanding of servers and utilities by designing and implementing configuration 6. Demonstrates advanced knowledge of disaster recovery procedures 7. Executes thorough disaster recovery testing procedures | 1. Develops and executes portions of complex change implementation plans 2. Projects performance and capacity using available tools 3. Identifies, determines the cause of, and corrects instances of server performance degradation 4. Resolves moderately complex operational problems and determines root cause 5. Demonstrates advanced understanding of servers and utilities by designing and implementing configuration 6. Demonstrates advanced knowledge of disaster recovery procedures 7. Executes thorough disaster recovery testing procedures | 1. Assesses change implementation options, benefits and risks, and recommends most appropriate direction 2. Provides guidance in predicting and monitoring performance and capacity and addressing related issues 3. Provides direction to resolve complex operational problems, collaborating with vendors and users as required and identifying trends that warrant immediate attention 4. Demonstrates expert understanding of servers and utilities by designing methods to ensure high performance 5. Demonstrates expert knowledge of disaster recovery procedures 6. Develops thorough disaster recovery testing procedures |  |
| **Functional/Technical Expertise: Deployment/ Systems Integration**  *Demonstrates the ability to plan, test and execute the pilot/implementation/ deployment of new or enhanced hardware or software.* | 1. Demonstrates basic understanding of advantages of new or upgraded product solution to users 2. Develops standard, routine portions of the implementation plan 3. Executes basic, routine testing and implementation steps according to plan 4. Demonstrates a basic understanding of how to contribute to the deployment strategy | 1. Demonstrates basic understanding of advantages of new or upgraded product solution to users 2. Develops standard, routine portions of the implementation plan 3. Executes basic, routine testing and implementation steps according to plan 4. Demonstrates a basic understanding of how to contribute to the deployment strategy | 1. Articulates expected benefits and potential limitations of product solution to users 2. Develops nonstandard, non-routine portions of the implementation plan, including steps to resolve hardware/software compatibility issues, test software and guide users in required operational changes 3. Assesses implementation options and recommends most appropriate process to the client 4. Ensures adherence of team to testing and installation procedures and resolves deviations with appropriate resources, on schedule and according to implementation plan 5. Helps other team members understand the deployment strategy and how to support its implementation | 1. Articulates expected benefits and potential limitations of product solution to users 2. Develops nonstandard, non-routine portions of the implementation plan, including steps to resolve hardware/software compatibility issues, test software and guide users in required operational changes 3. Assesses implementation options and recommends most appropriate process to the client 4. Ensures adherence of team to testing and installation procedures and resolves deviations with appropriate resources, on schedule and according to implementation plan 5. Helps other team members understand the deployment strategy and how to support its implementation | 1. Uses expert knowledge of how new or upgraded product solution will improve current business operations to prepare users for implementation 2. Develops plans for contingency/recovery situations for multiple projects 3. Defines deployment objectives and monitors overall implementation plan, timing, budget and key milestones for multiple projects 4. Collaborates with customers to define deployment expectations and ensure consistency with strategic direction 5. Coaches others in the execution of the testing, piloting, installation and implementation activities on schedule and within budget, and provides expertise when needed 6. Collaborates with appropriate responsible groups in the evaluation of how future technology solutions might impact future deployment strategies |  |
| **Functional/Technical Expertise: Operations Maintenance and Monitoring** *Ability to maintain operations environment and monitor performance, availability, and capacity* | 1. Maintains and repairs equipment as necessary 2. Demonstrates ability to monitor and report status of systems using available tools | 1. Coordinates the installation/ implementation of physical operating infrastructure 2. Analyzes operating efficiency and recommends measures to improve performance and availability | 1. Coordinates the installation/ implementation of physical operating infrastructure 2. Analyzes operating efficiency and recommends measures to improve performance and availability | 1. Leads others in maintaining the operations environment 2. Implements methods to improve service based on the evaluation of physical equipment and infrastructure 3. Establishes overall operational performance standards that support the environment and meet user goals 4. Oversees operations activities to optimize performance, capacity and availability | 1. Leads others in maintaining the operations environment 2. Implements methods to improve service based on the evaluation of physical equipment and infrastructure 3. Establishes overall operational performance standards that support the environment and meet user goals 4. Oversees operations activities to optimize performance, capacity and availability |  |
| **Functional/Technical Expertise: Data Preservation** *Knowledge of data retention requirements* | 1. Applies basic understanding of backup, restore and data retention policies and procedures | 1. Applies advanced understanding of backup, restore, and data retention policies and procedures | 1. Applies advanced understanding of backup, restore, and data retention policies and procedures | 1. Develops policies and procedures for backup, restore, and data retention activities and addresses instances of non adherence to policies and procedures | 1. Develops policies and procedures for backup, restore, and data retention activities and addresses instances of non adherence to policies and procedures |  |
| **Functional/Technical Expertise: Disaster Recovery** *Knowledge of disaster recovery procedures* | 1. Demonstrates basic knowledge of disaster recovery procedures 2. Assists in disaster recovery testing | 1. Develops disaster recovery plans and procedures 2. Performs testing of disaster recovery procedures | 1. Develops disaster recovery plans and procedures 2. Performs testing of disaster recovery procedures | 1. Demonstrates expert knowledge of disaster recovery procedures 2. Collaborates with users to determine disaster recovery needs and integrate those needs into contingency plan | 1. Demonstrates expert knowledge of disaster recovery procedures 2. Collaborates with users to determine disaster recovery needs and integrate those needs into contingency plan |  |
| **Functional/Technical Expertise: Data Preservation** *Knowledge of data retention requirements* | 1. Applies basic understanding of backup, restore and data retention policies and procedures | 1. Applies advanced understanding of backup, restore, and data retention policies and procedures | 1. Applies advanced understanding of backup, restore, and data retention policies and procedures | 1. Develops policies and procedures for backup, restore, and data retention activities and addresses instances of non adherence to policies and procedures | 1. Develops policies and procedures for backup, restore, and data retention activities and addresses instances of non adherence to policies and procedures |  |
| **Functional/Technical Expertise: Disaster Recovery** *Knowledge of disaster recovery procedures* | 1. Demonstrates basic knowledge of disaster recovery procedures 2. Assists in disaster recovery testing | 1. Develops disaster recovery plans and procedures 2. Performs testing of disaster recovery procedures | 1. Develops disaster recovery plans and procedures 2. Performs testing of disaster recovery procedures | 1. Demonstrates expert knowledge of disaster recovery procedures 2. Collaborates with users to determine disaster recovery needs and integrate those needs into contingency plan | 1. Demonstrates expert knowledge of disaster recovery procedures 2. Collaborates with users to determine disaster recovery needs and integrate those needs into contingency plan |  |

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| Job Family: | Information Technology | | | | | | |
| Job Sub-Family | Network/Communication Design, Deployment and Management | | | | | | |
| Sub-Family Activities | Manages infrastructure related to networks and hardware to ensure availability, recoverability, performance, integrity and supportability through production support and maintenance of existing network and development and implementation of network enhancements.  All positions in this job family participate to some degree in the following activities:   * Production Support – monitoring, troubleshooting, configuring, enhancing and providing advanced customer support for the existing network * Deployment/Implementation – planning and executing the implementation of new network designs or configurations or enhancements to the existing network * Design – researching, recommending and designing new technologies, new configurations and enhancements to existing networks. Providing consulting advice to customers on the capabilities of the network environment | | | | | | |
| Career Level | LEVEL 1 Entry Exempt Contributor | LEVEL 2 Developing Exempt Contributor | LEVEL 3 Intermediate Exempt Contributor | LEVEL 4 Senior Exempt Contributor | LEVEL 5 Expert/Integrator | LEVEL 6 Strategic Technical Advisor | |
| Job Titles | Associate IT Analyst – Network | IT Analyst – Network | Senior IT Analyst – Network | IT Specialist – Network | Senior IT Specialist – Networking | IT Strategist | |
| Typical Roles and Responsibilities | 1. Assists in testing, adjusting and troubleshooting equipment as requested 2. Utilizes software and hardware tools to identify and diagnose problems and factors affecting network performance 3. Supports implementation / deployment of network enhancements or new network designs | 1. Provides tactical troubleshooting of network hardware and software problems with support of senior technicians 2. Procures, configures, deploys and maintains networking infrastructure 3. Provides input on network design 4. Interfaces with vendors for procurement and deployment 5. Monitors network performance and capacity 6. Monitors networking systems and advises higher level technicians / supervisor of network status 7. Participates in implementation / deployment planning and execution | 1. Troubleshoots straightforward networking problems independently by investigating underlying problems 2. Designs networking infrastructure and interfaces to external networks 3. Participates in the design of new or modified LANs/WANs and advises on network design 4. Assures external security 5. Provides cost / benefit analysis on intermediate projects 6. Participates in evaluation of vendor proposals 7. Conducts network studies and performance analyses and recommends changes 8. May function in a lead capacity within department and represent department in workflow, escalation discussions with others 9. Leads implementation and deployment efforts on intermediate projects | 1. Provides highest level troubleshooting on unique problems unanswered at lower levels 2. Serves as highest level technical resource for a networking technology 3. Works outside immediate discipline to coordinate a group of people in troubleshooting a wide-scale problem; serves as point-of-contact across several areas or disciplines to solve major network outages with high impact or visibility 4. Provides expert technical advice and counsel to management and to less experienced infrastructure developers 5. Evaluates, recommends and selects appropriate hardware and software for systems infrastructure 6. Recommends systems integration required to support business applications needs 7. Performs cost/benefit analysis on more complex projects 8. Performs lead role in reviewing vendor proposals and making recommendations 9. Undertakes the most complex capacity planning, analysis and engineering design changes 10. Leads implementation and deployment efforts on large projects 11. Designs and leads implementation of hardware / software / environment standards based on business strategy and architecture 12. Undertakes and leads the most complex projects | 1. Provides strategic leadership and highest level technical expertise for specific applications, databases, technologies, platforms or methodologies 2. Evaluates how future technology solutions affect current and future business strategies and practices 3. Pioneers, owns, leads, and provides technical expertise with multiple technologies that span lines of business and affect software, data, network / communication, and computing platform technologies OR as the deepest expert on multiple network technologies | 1. Advises IT leadership and/or business executives as ’s highest level resource for applying information technology to delivering strategic business results   *Advancement to this level is a case-by-base determination by Executive Leadership, based upon a sustained track record of extraordinary contributions and/or industry and professional credentials* | |
| **Functional/Technical Expertise: Networks / Communications Technology**  *Demonstrates ability to design and install network configurations and provide maintenance to ensure the integrity of data, voice, local area and wide area networks (e.g., monitor performance and administer security).* | 1. Demonstrates basic understanding of hardware, software, and networking components of local, wide area and telephony networks 2. Demonstrates ability to understand the rationale for a particular network architecture 3. Displays understanding of current planned network service levels 4. Displays ability to troubleshoot networks / network applications 5. Applies basic understanding of voice / data network security features 6. Demonstrates basic understanding of network management systems and utilities | 1. Demonstrates basic understanding of hardware, software, and networking components of local, wide area and telephony networks 2. Demonstrates ability to understand the rationale for a particular network architecture 3. Displays understanding of current planned network service levels 4. Displays ability to troubleshoot networks / network applications 5. Applies basic understanding of voice / data network security features 6. Demonstrates basic understanding of network management systems and utilities | 1. Demonstrates advanced understanding of hardware, software, and networking components of local, wide area and telephony networks 2. Applies understanding of complex networks to develop sophisticated network configurations and documents procedures for operation and monitoring 3. Demonstrates ability to analyze, redesign and document (work flows) architectures for network applications 4. Identifies, determines cause of, and corrects network performance degradation 5. Identifies potential voice / data network security risks and recommends plan to address or eliminate risks 6. Demonstrates advanced understanding of network management systems and utilities | 1. Demonstrates advanced understanding of hardware, software, and networking components of local, wide area and telephony networks 2. Applies understanding of complex networks to develop sophisticated network configurations and documents procedures for operation and monitoring 3. Demonstrates ability to analyze, redesign and document (work flows) architectures for network applications 4. Identifies, determines cause of, and corrects network performance degradation 5. Identifies potential voice / data network security risks and recommends plan to address or eliminate risks 6. Demonstrates advanced understanding of network management systems and utilities | 1. Demonstrates expert understanding of hardware, software, and networking components of local, wide area and telephony networks 2. Leads project teams in the design of complex network architectures 3. Provides strategic direction for the development of complex network designs to maximize efficiency and minimize operating costs 4. Determines optimum service levels based on business requirements and architecture capability 5. Coordinates and develops the policies and procedures for voice / data network security audits 6. Demonstrates expert understanding of network management systems and utilities |  | |
| **Functional/Technical Expertise: Deployment / Systems Integration**  *Demonstrates the ability to plan, test and execute the pilot / implementation / deployment of new or enhanced hardware or software.* | 1. Demonstrates basic understanding of advantages of new or upgraded product solution to users 2. Develops standard, routine portions of the implementation plan 3. Executes basic, routine testing and implementation steps according to plan 4. Demonstrates a basic understanding of how to contribute to the deployment strategy | 1. Demonstrates basic understanding of advantages of new or upgraded product solution to users 2. Develops standard, routine portions of the implementation plan 3. Executes basic, routine testing and implementation steps according to plan 4. Demonstrates a basic understanding of how to contribute to the deployment strategy | 1. Articulates expected benefits and potential limitations of product solution to users 2. Develops nonstandard, non-routine portions of the implementation plan, including steps to resolve hardware/software compatibility issues, test software and guide users in required operational changes 3. Assesses implementation options and recommends most appropriate process to the client 4. Ensures adherence of team to testing and installation procedures and resolves deviations with appropriate resources, on schedule and according to implementation plan 5. Helps other team members understand the deployment strategy and how to support its implementation | 1. Articulates expected benefits and potential limitations of product solution to users 2. Develops nonstandard, non-routine portions of the implementation plan, including steps to resolve hardware/software compatibility issues, test software and guide users in required operational changes 3. Assesses implementation options and recommends most appropriate process to the client 4. Ensures adherence of team to testing and installation procedures and resolves deviations with appropriate resources, on schedule and according to implementation plan 5. Helps other team members understand the deployment strategy and how to support its implementation | 1. Uses expert knowledge of how new or upgraded product solution will improve current business operations to prepare users for implementation 2. Develops plans for contingency/recovery situations for multiple projects 3. Defines deployment objectives and monitors overall implementation plan, timing, budget and key milestones for multiple projects 4. Collaborates with customers to define deployment expectations and ensure consistency with strategic direction 5. Coaches others in the execution of the testing, piloting, installation and implementation activities on schedule and within budget, and provides expertise when needed 6. Collaborates with appropriate responsible groups in the evaluation of how future technology solutions might impact future deployment strategies |  | |

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| Job Family: | Information Technology | | | | | | |
| Job Sub-Family | Customer Support | | | | | | |
| Sub-Family Activities | Fulfill customer requests, resolve customer technical problems, and respond to customer questions in a quality and timely manner to ensure ongoing effectiveness of the desktop computing environment.  All positions in this job family participate to some degree in the following activities:   * Production Support – monitoring, troubleshooting, configuring, enhancing and providing advanced customer support for the existing network & desktop environment * Deployment/Implementation – planning and executing the implementation of new network designs or configurations or enhancements to the existing network & desktop environment | | | | | | |
| Career Level | LEVEL 1 Entry Exempt Contributor | LEVEL 2 Developing Exempt Contributor | LEVEL 3 Intermediate Exempt Contributor | LEVEL 4 Senior Exempt Contributor | LEVEL 5 Expert / Integrator | LEVEL 6 Strategic Technical Advisor | |
| Job Titles | Associate IT Analyst – Customer Support | IT Analyst – Customer Support | Senior IT Analyst – Customer Support | IT Specialist – Client/Desktop Systems | Senior IT Specialist – Client/Desktop Systems | IT Strategist | |
| Typical Roles and Responsibilities | 1. Documents specific dept information into case management system 2. Participates in on-call rotation, including evenings and weekends (helpdesk) 3. Implements new systems (as directed by project). | 1. Documents specific department information into case management system 2. Review business needs recommends appropriate hardware/software purchase 3. May act as Lead for department projects, administer and manage work assignments as outlined by management 4. Participates in on-call rotation, including evenings and weekends. 5. Coordinates moves, changes and installations of telecom equipment and network services, VPN remote connectivity 6. Analyzes billing and performs studies to ensure desired level of service 7. Communicates outages to IT support organization and customers 8. Troubleshoots telephony issues that may involve hardware, software, etc. Works with outside vendors and departments. 9. Develops and provides end user training on desktop and telephony 10. Implements new systems (as directed by project) 11. A+ certification required; Compaq and IBM certification optional but desirable; helpdesk rep certification is desirable. | 1. Documents specific department information into case management system 2. Review business needs and recommends appropriate hardware/software purchases 3. Facilitates/participates to resolve complex desktop and connectivity issues spanning multiple business areas (e.g. “war-rooms”) 4. Acts as lead for department projects administering and managing work assignments to other team members as outlined by management 5. Facilitates and mentors development of other technical analysts 6. Participates on on-call rotation, including evenings and weekends 7. Works with analysts/vendors to resolve complex desk and connectivity issues 8. Coordinates moves, changes and installation of telecommunications equipment and network services, VPN (remote connectivity) 9. Troubleshoots telephony issues that may involve hardware/software, etc. Works with outside vendors and departments 10. Develops and provides end user training on desktop and telephony 11. Implements new systems (as directed by projects) 12. Coordinates moves, changes and installation of IT assets, e.g. hardware, software, etc. Manages disposition (Retrobay, Depo) 13. A+ certification required; Compaq and IBM certification desired. May have MCSE. |  | 1. Provides strategic leadership and highest level technical expertise for specific applications, databases, technologies, platforms or methodologies 2. Evaluates how future technology solutions affect current and future business strategies and practices 3. Pioneers, owns, leads, and provides technical expertise with multiple technologies that span lines of business and affect software, data, network / communication, and computing platform technologies OR as the deepest expert on multiple client technologies | 1. Advises IT leadership and/or business executives as ’s highest level resource for applying information technology to delivering strategic business results   *Advancement to this level is a case-by-base determination by Executive Leadership, based upon a sustained track record of extraordinary contributions and/or industry and professional credentials professional credentials* | |
| **Functional/Technical Expertise: Customer Support**  *Ability to work within and monitor established service levels and key performance indicators* | 1. Demonstrates understanding of and adherence to defined service levels, goals and objectives when providing customer support | 1. Identifies and communicates customer service level issues | 1. Assists in defining service level agreements based on goals, objectives, customer needs and industry benchmarks 2. Monitors performance against established service levels |  |  |  | |
| **Functional/Technical Expertise: Customer Support Technology**  *Demonstrates knowledge of customer service center technology and techniques* | 1. Demonstrates basic knowledge of tools, applications and techniques used in customer service center | 1. Demonstrates advanced knowledge of tools, applications and techniques used in customer service center 2. Identifies improvements to customer service techniques within own work area | 1. Demonstrates expert knowledge of tools, applications and techniques used in customer service center 2. Assesses the overall effectiveness of tools, applications and techniques used in customer service center |  |  |  | |
| **Functional/Technical Expertise: Customer Needs**  *Demonstrates ability to identify customer needs and support requirements* | 1. Demonstrates basic understanding of the customer’s needs and support requirements | 1. Applies support experience by suggesting improvements to products and services | 1. Shares customer and customer service center feedback with appropriate groups to improve products and services |  |  |  | |

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| Job Family: | Information Technology | | | | | | |
| Job Sub-Family | Data Management | | | | | | |
| Sub-Family Activities | Manages infrastructure related to databases, database access, and administration tools to ensure availability, recoverability, performance, integrity and supportability through production support and maintenance of existing systems and development and implementation of systems enhancements.  All positions in this job family participate to some degree in the following activities:   * Production Support – monitoring, troubleshooting, configuring, enhancing and providing advanced customer support for database applications * Deployment/Implementation – planning and executing the implementation of new applications or changes or enhancements to existing applications * Design – providing consulting advice to applications developers on the capabilities and constraints of the existing database and application environment | | | | | | |
| Career Level | LEVEL 1 Entry Exempt Contributor | LEVEL 2 Developing Exempt Contributor | LEVEL 3 Intermediate Exempt Contributor | LEVEL 4 Senior Exempt Contributor | LEVEL 5 Expert / Integrator | LEVEL 6 Strategic Technical Advisor | |
| Job Titles | Associate IT Analyst – Data | IT Analyst – Data | Senior IT Analyst – Data | IT Specialist – Data | Senior IT Specialist – Data | IT Strategist | |
| Typical Roles and Responsibilities | 1. Assists in testing, adjusting and troubleshooting systems as requested 2. Utilizes software and hardware tools to identify and diagnose problems and factors affecting systems performance 3. Configures and administers databases and data access software 4. Supports implementation of new systems | 1. Assists in the implementation and maintenance of databases 2. Provides tactical troubleshooting of systems problems with support of senior technicians 3. Provides ongoing operation/support of enterprise-wide applications, databases, and technology 4. Monitors systems performance and capacity and advises higher level technicians / supervisor of system status 5. Participates in planning and execution of new systems implementation / deployment 6. Participates in 7X24 on-call support | 1. Designs, implements and maintains moderately complex databases 2. Ensures systems integration through data design 3. Troubleshoots straightforward systems problems independently by investigating underlying problems 4. Advises developers in design of new applications by providing expertise on database platform capabilities and constraints 5. Understands and consults on corporate security policy 6. Provides cost / benefit analysis on intermediate projects 7. Participates in evaluation of vendor proposals 8. Conducts systems studies and performance analyses and recommends changes 9. May function in a lead capacity within department and represent department in workflow, escalation discussions with others 10. Leads implementation and deployment on intermediate projects 11. Performs data modeling; develops physical designs that demonstrate trade-offs between logical design and system performance 12. Participates in 7X24 on-call support | 1. Designs, implements and maintains complex databases 2. Monitors standards and procedures 3. Serves as an expert consultant to applications developers to provide expertise on database capabilities and constraints 4. Provides highest level troubleshooting on unique problems unanswered at lower levels 5. Serves as highest level technical resource for an enterprise-wide application 6. Works outside immediate discipline to coordinate a group of people in troubleshooting a wide-scale problem; serves as point-of-contact across several areas or disciplines to solve major systems outages with high impact or visibility 7. Provides expert technical advice and counsel to management and to less experienced systems analysts 8. Recommends appropriate hardware/software platforms 9. Recommends systems integration required to support business applications needs 10. Develops infrastructure and ensures integration 11. Performs cost/benefit analysis on more complex projects 12. Performs lead role in reviewing vendor proposals and making recommendations 13. Leads implementation and deployment efforts on large projects 14. Mentors less experienced employees | 1. Provides strategic leadership and highest level technical expertise for specific applications, databases, technologies, platforms or methodologies 2. Evaluates how future technology solutions affect current and future business strategies and practices 3. Pioneers, owns, leads, and provides technical expertise with multiple technologies that span lines of business and affect software, data, network / communication, and computing platform technologies | 1. Advises IT leadership and/or business executives as ’s highest level resource for applying information technology to delivering strategic business results   *Advancement to this level is a case-by-base determination by Executive Leadership, based upon a sustained track record of extraordinary contributions and/or industry and professional credentials* | |
| **Functional/Technical Expertise:****Database Design** *Knowledge of database design principles and data administration standards* | 1. Demonstrates basic knowledge of database design principles and data administration standards | 1. Demonstrates advanced knowledge of database design principles and data administration standards | 1. Demonstrates advanced knowledge of database design principles and data administration standards | 1. Demonstrates expert knowledge of database design principles and data administration standards 2. Ensures that database design activities and data standards support the organization’s business strategy | 1. Demonstrates expert knowledge of database design principles and data administration standards 2. Ensures that database design activities and data standards support the organization’s business strategy |  | |
| **Functional/Technical Expertise: Requirements Definition** *Ability to define user data requirements and specifications* | 1. Documents database design requirements based on information gathered | 1. Maps workflow and creates moderate to complex design specifications based on functional requirements | 1. Maps workflow and creates moderate to complex design specifications based on functional requirements | 1. Collaborates with customers to identify data needs, including access, protection, quality and maintenance requirements 2. Recommends database design alternatives, considering benefits and limitations to users based on in-depth understanding of their data needs | 1. Collaborates with customers to identify data needs, including access, protection, quality and maintenance requirements 2. Recommends database design alternatives, considering benefits and limitations to users based on in-depth understanding of their data needs |  | |
| **Functional/Technical Expertise: Data Modeling** *Ability to design database structure and relationships* | 1. Creates basic entity relationship data models for a relational database | 1. Translates logical information model to efficient physical database designs 2. Trains others in the logical and physical design of databases | 1. Translates logical information model to efficient physical database designs 2. Trains others in the logical and physical design of databases | 1. Provides consulting expertise to users and application developers regarding database platform and design | 1. Provides consulting expertise to users and application developers regarding database platform and design |  | |
| **Functional/Technical Expertise: Database Maintenance** *Ability to maintain databases* | 1. Demonstrates basic understanding of database performance tuning, data backup, recovery and security processes/ procedures | 1. Demonstrates advanced understanding of database performance tuning, data backup, recovery and security processes/ procedures | 1. Demonstrates advanced understanding of database performance tuning, data backup, recovery and security processes/ procedures | 1. Demonstrates expert understanding of database performance tuning, data backup, recovery and security processes/ procedures 2. Maintains responsibility for ensuring the integrity and successful recovery of data | 1. Demonstrates expert understanding of database performance tuning, data backup, recovery and security processes/ procedures 2. Maintains responsibility for ensuring the integrity and successful recovery of data | |  |
| **Functional/Technical Expertise: Database tools** *Knowledge of database tools* | 1. Demonstrates basic knowledge of database design tools and utilities 2. Demonstrates basic knowledge of data access and reporting tools to allow users to access data on an as needed basis | 1. Demonstrates advanced knowledge of database design tools and utilities 2. Demonstrates advanced knowledge of data access and reporting tools to allow users to access data on an as needed basis | 1. Demonstrates advanced knowledge of database design tools and utilities 2. Demonstrates advanced knowledge of data access and reporting tools to allow users to access data on an as needed basis | 1. Demonstrates expert knowledge of database design tools and utilities 2. Demonstrates expert knowledge of data access and reporting tools to allow users to access data on an as needed basis | 1. Demonstrates expert knowledge of database design tools and utilities 2. Demonstrates expert knowledge of data access and reporting tools to allow users to access data on an as needed basis | |  |