Software Engineering Career Family
LEVEL DESCRIPTIONS

Jobs in this family perform software engineering work that is focused on interfacing with clients, vendors and other technologists to discover and identify business and technical requirements, determining the most efficient and cost-effective solution, and translating requirements into well-engineered, tested and deployed business application systems. This is accomplished through coordination of business process analysis and design; alignment of technology to agency program needs; and defining solutions that utilize a variety of hardware and software technologies and may include new code construction, modifications to existing systems, and/or commercial-off-the-shelf implementations. The jobs in this family are also responsible for helping to develop and advance a long-range vision of how IT will support government; and analyzing, designing, programming, testing, installing and maintaining the resulting information systems to include IT portfolio management, IT development architecture/standards/policy creation, quality assurance, business security/risk management, business continuity and project management.

Managerial Track

Professional Track

Summary

Directs large teams of software engineers with diverse skill sets or manages and administers the development and maintenance of applications systems for assigned functional areas or agencies. This role is the first level of supervision where the employee has both technical and full administrative responsibility for staff. Employees in this role have both functional and administrative responsibility for the execution and success of multiple activities and projects, including systems analysis, applications software, and programming, for varied complex types of applications systems and where coordination across teams is required. Work at this level requires thorough and broad knowledge of the areas managed, including related BIT and clients technical issues and requirements; ability to address broad operational issues; and the authority to make annual operational decisions within the context of longer-term planning.

Nature of Work

- Understands and clearly articulates software engineering goals for assigned area as context for tactical operational planning; participates in the development of the larger BIT vision and provides input in the strategic planning process.
- Instills a sense of vision and direction in teams and creates a positive work environment that leverages the strengths of members and focuses on individual, team, and BIT software engineering-wide developmental areas in order to increase the capabilities and ensure success of the development and maintenance of systems.
- Establishes a culture of innovation, encouraging and rewarding new approaches that improve efficiencies, effectiveness, quality, and service value; identifies and implements more effective and cost efficient approaches for delivering service, that may include changes in technology, roles, and/or processes; continually improves work procedures and processes for area(s) managed to strike the optimal balance between performance, customer services, and cost management.
- Maintains broad understanding of software engineering and strong knowledge of architectures and strategies across BIT, participating as a leader in their development.
- Serves as primary client relationship manager and maintains recognition as thoroughly knowledgeable about the business areas supported including their strategies, functional processes, and dynamics; demonstrates significant and increasing knowledge of other business areas within the State, overall State strategies, and key trends; factors this knowledge into decision making regarding investments and strategies; leads or participates in division or bureau-wide projects.
- Partners with clients and senior management as appropriate to determine which projects to approve and fund; manages multiple projects, usually through supervision of project leaders, including establishing plans, prioritizing initiatives and ensuring resources and organizational structure are in place and operating effectively; anticipates and proactively resolves conflicting needs; manages organizational challenges and obstacles to success for key projects.
- Integrates the potentially diverse needs of many clients and stakeholders and successfully manages varying perspectives; communicates with key stakeholders to monitor and facilitate satisfaction; monitors project leader communications with clients, mentors, and ensures project deliverables meet specifications.
- Delegates supervision and/or integrates activities across teams with the aim of accomplishing applications systems development and maintenance goals while balancing priorities, business requirements, costs, standard practices, and staffing.
- Works with supervisory team leaders to identify training needs; provides policy direction on required trainings; provides career counseling, with particular attention to developing top management and technical talent for the future.
- Sets a framework for the provision and support of solutions, including resourcing, project management, and development standards.
- Manages and engages in effective people management activities such as recruitment, interviewing, hiring, training and retention, including personnel actions such as performance reviews and discipline to ensure adequate and competent staff; approves hiring recommendations.
- Manages budget(s) to achieve budget objectives and ensure proper expenditure of funds.

Competencies

- Displays Integrity & Commitment
- Acts Decisively
- Builds Strong Alliances
- Demonstrates Astuteness
- Builds Competence

- Exercises Due Diligence
- Focuses on Customer Needs
- Achieves Successful Results
- Communicates Powerfully
- Develops Successful Teams

Job Knowledge (typical education/experience preferred for entry into the level)

Typically requires a degree in software engineering or related field, plus progressive software engineering experience typically over 15 or more years, including 2-4 years experience managing others in a supervisory capacity.

Career Development

This role provides the opportunity to strengthen leadership abilities and make a primary commitment to management with full personnel authority; lead and build multiple effective teams of professional staff and/or first level management, including setting the direction and establishing the culture of the teams; gain pride from facilitating others' success and impact career development; learn budget development and fiscal management; and influence BIT and statewide policies.

To develop proficiently in this role, it will be important to identify what motivates key stakeholders, peers, and employees; delegate responsibility and focus primarily on leading and providing direction, including accepting that one will no longer be the "technical expert"; develop the talents and skills of team leaders; accept responsibility for team performance and support team needs and decisions; identify ways to manage stress and display patience; research and utilize others expertise to form decisions, exercise sound judgement, and develop a solid vision and direction; strengthen key relationships; and listen and communicate effectively in order to inform, educate, influence, and ensure understanding.