Designs, develops, documents, tests and debugs applications software and systems that contain logical and mathematical solutions. Conducts multidisciplinary research and collaborates with equipment designers and/or hardware engineers in the planning, design, development and utilization of electronic data processing systems for product and commercial software. Determines computer user needs; analyzes system capabilities to resolve problems on program intent, output requirements, input data acquisition, programming techniques and controls; prepares operating instructions; designs and develops compilers and assemblers, utility programs, and operating systems. Ensures software standards are met.

Discretion/Latitude

Acts with Business Areas in an engineering leadership capacity to uncover and resolve issues associated with the development and implementation of operational programs and business pursuits. Identifies, recommends and aligns R&D programs and technological applications to accomplish long-range business objectives. Develops and maintains the Business Area Technology Roadmap. Work is checked only to the effectiveness of results obtained, typically from a short-term perspective for operational issues and longer-term perspective for technology alignment to Business Area strategies.

Knowledge, Skills, and Abilities

Exhibits an exceptional degree of ingenuity, creativity, resourcefulness and technical leadership. Applies and/or develops highly advanced technologies, scientific principles, theories and concepts to meet the needs of the Business Area. Viewed as a leading expert in applying technology and solving operational issues in support of the Business Area's objectives. Establishes long-range marketing plans and technology Roadmaps for the Business Area's products and services by identifying, analyzing and developing new business opportunities. Establishes customer contacts, develops proposals, and delivers technical marketing presentations. Cultivates and maintains relationships with key decision makers.

Problem Solving

Applies technological and engineering leadership skills in the achievement of the Business Area's operational and strategic goals. Applications may be diverse and include newly developed concepts, theories and products, or engineering disciplines.

Impact

Sets the technological direction for the Business Area and corrects the course of errant technological direction when warranted. Erroneous decisions or recommendations would have a long-term negative effect on the organization's reputation and business posture. Leads development and implementation of key programs and/or processes for the Business Area.

Liason

Serves as consultant to Business Area top management in long-range company planning concerning new or projected areas of technological research, advancements and current program technical performance. Prime spokesperson on Business Area's technical capabilities and future directions. Often instrumental in attracting and obtaining major new company business.

Minimum Education and Experience

20+ years of broad and extensive professional experience with a BS in Engineering or a related field. Employees usually have advanced degrees in engineering.