

TECHNICAL PROGRAM MANAGEMENT

Transforming Engineering Teams into Competitive Differentiators

Effective leader of large and mid-size technology R&D projects in Academic Institutions, eCommerce, medical device, semiconductor, automotive and aerospace industries. Consistent track record of transforming chaotic teams and failing products into effective organizations whose products achieve significant market share gains.

Specific Accomplishments In Engineering Management:

- Managed data science, data engineering, and devops teams for first-time deployments of artificial intelligence-based chatbots at Harvard Business School.
- Developed and deployed portfolio management, project tracking and collaboration tools producing highly-iterative, cross-functional Marketing-Engineering dialogs. Tools enabled development of optimized product roadmaps and tight integration between on-shore and off-shore development teams.
- Project managed development and launch of major eCommerce retail and business-to-business websites on-time, on-budget, and with near-zero defects. B2B website's improved ease-of-use, speed, and search resulted in revenues exceeding plan by greater than 33%.
- Agile Scrum Master course instructor and project mentor
- Extensive experience in requirements analysis in customer-facing roles for product roadmap planning
- Led teams that re-engineered products for improved features, reliability, and maintainability. New products achieved extremely high rates of reliability; exceeding 2000 hours.
- Assembled and led Tiger Teams resulting in quick solutions to critical issues and products with best in class reliability rates. Repeated successes teaching/executing problem-solving techniques for issue containment and long-term resolution.
- Drove transitions from failed software development processes to industry best practices, including migrations to Agile/Scrum processes, which quickly achieved measurable turn-around in product quality and schedule performance.

PROFESSIONAL EXPERIENCE AND ACCOMPLISHMENTS

PMO Accelerator Services LLC Owner

2023 - Present

The mission of PMO Accelerator Services is to work with organizations that recognize their challenges in meeting their business goals and are aware of new processes, development techniques, and tools to satisfy those goals. PMO Accelerator Services' mission is to help these organizations adopt these new development methods and technologies, train and build their staff, and produce great products. See the company's website at www.pmoacceleratorservices.com.

Harvard Business School

2024

Technical Project Manager – Artificial Intelligence in Digital Transformation

Harvard Business School (HBS) is a globally renowned institution for business education, known for its influential MBA program, pioneering case study methodology, and extensive research contributions that shape leadership and management practices worldwide.

- Technical Project Manager for Artificial Intelligence and Machine Learning projects
- Delivered AI-based chatbots benefitting HBS's student body and course instructors
- Extensive involvement in data engineering team daily planning and execution, deployment of chatbots into production, establishing support systems and processes for deployed chatbots

Levi Strauss, Inc.

2022 - 2023

Senior Technical Project Manager – Data Analytics & Strategy

Levi Strauss is one of the world's largest apparel companies and a global leader in the manufacturing and sale of jeans across 500 stores worldwide.

- Technical Project Manager for Artificial Intelligence and Machine Learning projects
- Delivered AI capabilities optimizing performance in retail operations and ecommerce applications
- Extensive involvement in project requirements development, data science team daily planning and execution, deployment of data science models into production

Pragiti, Inc.

2016 - 2022

Project Manager

Pragiti, Inc. is eCommerce service company specializing in development and maintenance of SAP Hybris websites for its clients.

- Created and conducted extensive Agile/Scrum training across company's US and offshore campuses
- Instituted Agile/Scrum practices consisting of:
 - Client-facing processes for requirements-gathering, User Story compilation, User Story approval and testing
 - Company-facing processes for project estimation, release and sprint planning, Scrum Master mentoring, build processes, test management, and quality metrics collection and reporting
 - Established and enhanced governance practices for architecture and design development, implementation, and testing
- Project-managed multi-national Hybris clients challenged by disparate end-users, IT organizations, and partner organizations. Devised measures that mitigated project roadblocks, demonstrated value to the client, and laid the foundations for follow-on contracting with client's organizational units.

West Marine

2013 - 2016

IT Senior Project Manager

West Marine is a mid-sized retail company whose IT department supports all operations in eCommerce, store operations, and corporate functions.

Assumed project management of eCommerce website development which was severely behind schedule, incurring major defects and revenue losses.

- Sharpened team's execution by aggressively using Agile/Scrum techniques and collaboration environments (JIRA/Confluence) for team-wide coordination.
- Led User Story creation and acceptance meetings. Led major development effort to construct a high-fidelity test environment for User Story acceptance by QA and UAT teams.
- Reduced go-live transition risks by leading development of detailed rollout processes. Orchestrated rehearsals of rollouts to insure accuracy and robustness of planned activities.
- Received company recognition for the most successful, on-time and on-budget launch in company's history with near seamless transition, virtually zero defects. Website's improved ease-of-use, speed, and search resulted in revenues exceeding plan by greater than 33%.

BD Biosciences

2009 - 2013

Manager, Product Quality, Software Configuration Management, And Process Engineering

BD manufactures high technology medical instruments used for research and clinical applications.

Assumed management of 60+ Software/Firmware Quality Engineering group lacking quality measurement practices, capacity for metrics analysis, data collection or reporting.

- Dramatically improved SW – SQE integration through status-tracking and testing progress reporting innovations that re-affirmed, weekly, requirement's implement status, their testability, and testing results.
- Instituted advanced Earned Value (EV) and Earned Schedule (ES) techniques for week-to-week reporting on performance. Measurements repeatedly drove 700,000 lines of code development through progress measurement and re-baselining decisions.
- Achieved 2X improvement results feedback through offshore 24 x 5 product testing cycle
- Achieved 10X productivity gains through test automation and automated, nightly build and testing

Assumed management of SCM group supporting 120+ SW developers with chaotic build practices and repeated failures to build products.

- Rebuilt and staffed organization to simultaneously meet the following needs:

- Day-to-day support of software and firmware organizations for server operations, build issue resolution, and services
- Strategic planning for capacity, tool evaluations and validations, and architectural planning for multi-campus, geographically-distributed product developments
- Instituted build practices leveraging continuous integration, branching, and measurement practices resulting in 4X improvement in build production.
- Upgraded server infrastructure for enterprise-level software development with 10X build-out of server services, making aggressive use of virtual machine technologies for seamless build services enhancement.
- Resolved recurring difficulties in local IT – Corporate resource planning through detailed workflow analyses that identified process breakdowns. Successfully instituted workflow enhancements to expedite resource planning and Corporate IT service delivery.

Asyst Technologies

2007 - 2009

Director, Product Engineering, Applications, and Support

Asyst (now Brooks Automation) manufactures robotics equipment for the semiconductor industry for silicon wafer handling applications.

Assumed management of Product Support organization challenged by poor customer relations, poor product support processes, and open-ended problems of product acceptance.

- Instituted cross-functional processes to clarify communications processes, correct product support problems, and escalate customer issues to expedite the delivery of solutions.
- Internal to group operations, instituted innovations for problem tracking, analysis, and resolution. Innovations allowed for metrics collection and optimization of group performance, workload planning, and enhanced cross functional coordination.
- Attained consistent 90%+ customer satisfaction ratings with top-tier customer accounts for multiple product lines. Attained reliability of MTBF of 2000 hours on installed base of tools at top-tier customers.

Director of Product Engineering group consisting of hardware, software, and product assurance engineers for product lines with \$65M in annual revenue.

- Instituted management processes and tool innovations enabling product roadmap planning, workforce planning, and enhanced product quality.
- Lead cross-functional teams for expedited resolution of critical product design and performance issues. Instituted and executed Intel-directed “Seven Step Problem-Solving Process” to promptly characterize, troubleshoot, and resolve robot performance issues. Performance lead to Asyst’s achieving Intel’s “Preferred Quality Supplier” award and product adoptions at top-tier customer sites.

Lockheed-Martin Integrated Systems & Solutions

2004 - 2006

Senior Staff, Software Technology Department

Lockheed-Martin manufactures high technology command and control systems for government and private sector applications.

- Successful proposal competition for TMOS, a \$2.1B, 5.0+ million lines of code, space-based networking system to extend broadband services to global users.
- Produced proposal products and program management office tools for software engineering management, risk management, trade studies, and proposal management.
- Modeled, prototyped, and verified performance of 250+ software developer tool environment for geographically distributed team. Seamless transition to operations cited as exemplary program startup.

KLA - Tencor, RAPID and Viper Divisions

1996 – 2004

Program Manager, Software Engineering Director

KLA-Tencor produces equipment for the semiconductor industry that improve yields through defect detection during the semiconductor manufacturing process.

In the RAPID division, directed staff of 25 through 8 product releases. Assumed management while products were losing market share, incurring deteriorating customer relations, and repeated cases of poor product quality and schedule performance.

- Led project management, engineering, and process initiatives leading to recapturing 90+% of market.
- Delivered critical product enhancements for advanced technology nodes inspections, product automation, and reliability improvements

- Instituted product development cost estimation processes leading to 90% improvement in schedule performance and quality.
- Conducted extensive, one-on-one meetings with strategic customers (US, Japan, Germany), and restored customer confidence in product-lines.
- Achieved \$25M “above plan” revenue, extensions of engineering partnerships and customer financing of new products.
- Defined and executed software processes leading to industry-leading Capability Maturity Model (CMM) ratings.

In the Viper Division, directed staff of 30+ while capturing over 80+% of the 200mm Automated Macro inspection market.

- Driven by this product’s commodity-market needs, directed multiple Product Lifecycle Team efforts for reliability improvements. Resulting product reliability surpassed all company products with peak rates of 504 hours/30,000 wafers between machine reliability events.
- Won 75% of Head to Head competitions where software reliability was major contributor to wins.

Directed multiple Product Life Cycle groups comprised of the Marketing, Applications, Engineering, Manufacturing, and Field Service organizations. Successfully drove cross functional teams of 12-14 members through multiple product enhancement, sustainment and head-to-head competitions.

SPACE APPLICATIONS CORPORATION

1988 – 1996

Project Manager, SEPG Chairman, Senior Systems Engineer

Space Applications produced software systems and performed systems engineering services for government agencies.

Performed all aspects of proposal creation, contract negotiations, scheduling, staffing and monitoring performance for the following high technology programs:

- GPS: Global Positioning System for world-wide navigational services to US government and commercial users. Directed real-time embedded software development for on-board functions and staff of 16 analysts and programmers. Completed all deliveries in 10 months, achieving all schedule and profit targets.
- DSP: Geosynchronous satellite system for detection of ballistic missile launches. Directed real-time software development for ground-based attitude determination, staff of 14 analysts and programmers. Turned-around project from cost overrun, process-compromised development to \$1M+ profitable contract; achieving status as “Selected Sub-Contractor” from IBM.
- UVPI: Ultra-Violet Plume Instrument; an experimental package for validating Strategic Defense Initiative technologies. Directed real-time embedded software development for on-board and mission planning functions and staff of 9 analysts and programmers. UVPI was the predecessor program to the extremely successful Clementine program; a moon-mapping and asteroid-rendezvous probe.
- S/DR: Customer Relationship Management (CRM) tool for tracking deficiencies and enhancement requests for worldwide network system. Rebuilt 100% of organization and supported on-going operations in parallel with major enhancements. Completed 2 deliveries to 400+ users with 0 defects, major enhancements in functionality, and minimal disruption to operations.

As Chairman of SW Engineering Process Group (SEPG), coordinated Capability Maturity Model (CMM) maturity assessments, identified process improvement goals, assigned resources to goals and monitored progress toward their completion.

- Maximized small company’s limited R&D budget by instituting a small business program with the Software Productivity Consortium.

PROCESSES, STANDARDS, TOOLS, PLATFORMS, AND ANALYSIS METHODS:

- Product Development Processes: Waterfall, Iterative Development, Agile/Scrum
- Standards: FDA 21 CFR Part 820 / ISO 13485, DOD Mil-Std 498/2167
- Software Platforms: Hybris, Websphere, Java, C#, C++, C, ADA, Simscript, Oracle, PowerBuilder, SQL Server, .NET, COM/DCOM, VxWorks, UNIX, Assembly Language
- SCM and Collaboration Tools: WIKI (Confluence), JIRA, Bugzilla, Clearcase/ClearQuest, MS Sharepoint
- Hardware Platforms: Intel, SPARC, DEC, Proprietary Super Computers, special-purpose processors, cell-based architectures

- Analysis Methodologies: UML, DODAF/TOGAF, Shlaer & Mellor OOA, Rumbaugh OMT, Ward & Mellor SA, Data Modeling

EDUCATION AND CERTIFICATIONS:

B.A. Astronomy, University of California at Berkeley, Berkeley, CA
 PMP Certified Project Manager
 Construx Scrum Master Trained

ASSOCIATIONS:

PMI Volunteer & Contributor

PROFESSIONAL PRESENTATIONS:

October 2017, Project Management Institute (PMI) Silicon Valley Symposium: "Low Resistance – High Impact Release Planning"	October 2015, Project Management Institute (PMI) Silicon Valley Symposium: "Web-Based Collaboration Tools For High-Speed, Low Drag Project Mgmt."
October 2013, Project Management Institute (PMI) Silicon Valley Symposium: "Project Management in an Increasingly Disruptive World". Presentation on "Test Automation ROI".	May 2013, 16th Software Design for Medical Devices Conference, "Test Automation ROI".
October 2012, Project Management Institute (PMI) Silicon Valley Symposium: "Succeeding with Distributed Project Teams". Presentation on "How Program Managers Can Best Exploit Testing Metrics".	May 2012, 15th Software Design for Medical Devices Conference, "Fostering Tight Synchronization between Software Developers and Testers".
June 2009 Atlassian Summit Conference, "Improving Product Support Through Web 2.0 and Emerging Technologies".	December 2008, 2nd Annual Field Workforce Optimization Summit, "Using Web 2.0 And Collaboration Tools To Optimize Field Service Performance".
May 1996 Presentation to 5th National Software Engineering Process (SEPG) conference. Chaired By SEI's Watts Humphrey. Subject: "Small Company Experiences With Software Process Improvement".	April 1996 Software Technology Support Center (STSC) Software Conference presentation on "Small Company Experiences With Software Process Improvement".