

COLM O'TOOLE, M.Sc., S.M.IEEE

FRONTIER SENIOR ENGINEERING EXECUTIVE | SENIOR SOFTWARE ENGINEERING MANAGER & TECHNICAL LEADER

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Accomplished Senior Software Engineering Manager & Technical Leader with 20+ years driving high-impact software delivery, strict FDA 21 CFR compliance, enterprise AI rollouts, and resilient team culture across Fortune 100 enterprises and high-growth innovators. Demonstrated expertise bridging deep technical architecture, regulatory governance, and strategic business objectives. Leadership philosophy centers on empathetic mentorship, radical transparency, and empowering teams through direct ownership.

168% — YoY Revenue Growth (Q2 2026)

50% — Capacity Gain w/o Headcount

10x — Defect Reduction (\$3M Savings)

CORE COMPETENCIES: FDA 21 CFR Compliance • AI Coding Agents & Rollouts • Empathetic Team Mentoring • Agile Turnaround & Gamification • System Architecture Reviews • Global Offshore Leadership • Patent & IP Board Governance

EXECUTIVE EXPERIENCE & IMPACT

WCG | Senior Scrum Master / Software Engineering Manager

March 2021 – October 2026

- **FDA 21 CFR Regulatory Compliance:** Directed 4 cross-functional software engineering teams (~15 senior engineers) developing WCG's flagship healthcare product under strict FDA 21 CFR requirements, consistently meeting and exceeding audit standards.
- **2026 Enterprise AI Rollout:** Educated, mentored, and coached engineering teams on AI coding, autonomous agents, skills, models, tokens, AI security, AI ethics, and AI-driven validation & testing workflows.
- **168% YoY Revenue Contribution:** Delivered feature enhancements for the flagship product, InvestigatorSpace. Working closely with the Product & Business Teams our strategic coordination directly contributed to 168% YoY revenue growth in Q2 2026.
- **50% Capacity Expansion Without Headcount:** Scaled team workload output by 50% over two years while maintaining headcount through decision delegation, bi-weekly individual coaching, and capacity tracking.
- **Deployment Quality Breakthrough:** Reduced escaped deployment defects from 1-in-3 releases to 1-in-10 by implementing peer reviews, early QA integration, and deep architectural reviews.
- **Greenfield Video App & Mobile Delivery:** Led a greenfield video meeting app from inception to beta in under 12 months; revitalized retired toolchains to deliver updated iOS and Android apps to store frontends.
- **Agile Gamification & Culture:** Rescued a failed Scrum implementation; resisted Agile adoption by reframing it and using gamified Agile education by hosting "Scrum Jeopardy" game shows and authoring short stories to engage teams.

ServiceTitan | Senior Scrum Master / Agile Transformation Lead

June 2018 – May 2020

- **Deployment Quality & Feature Integration:** Developed and managed the bi-weekly deployment framework, slashing escaped defects by 50% while simultaneously increasing feature integrations by 50%.
- **Intellectual Property & Patent Board:** Instrumental in establishing ServiceTitan's internal Patent Board to evaluate employee inventions and award patent recognition.
- **Global Team Transformation:** Championed Agile adoption across globally distributed teams in North America and Eastern Europe (Ukraine), establishing asynchronous workflows and partnering with local lead engineers to bridge language and time-zone barriers.
- **Change Management Roadshows:** Executed company-wide educational roadshows and individual 1-on-1 sessions to achieve Scrum acceptance.

DirecTV | Engineering Manager

September 2014 – June 2017

- **10x Defect Reduction & \$2M–\$3M Savings:** Managed 12 embedded C++ engineers responsible for the flagship Genie set-top box software (\$12M annual budget), driving down spontaneous reboots by an order of magnitude (10x) and saving \$2M–\$3M annually in support calls.
- **Core Codebase Protection ("Golden Goose"):** Architected sub-branching strategies, automated unit testing harnesses, and strict integration gates to protect the core codebase.
- **Special-Ops Diagnostics:** Led "special-ops" teams to perform deep root-cause analysis on critical technical issues that external vendors failed to solve.
- **Technical Acuity & Vendor Management:** Prevented critical deployment failures by visually identifying incorrect vendor binary packages (detecting missing driver files via package file size discrepancies).

Amazon & Microsoft | Software Development Engineer & Build / QA Lead

1999 – 2013

- **Amazon e-Ink Kindle Internationalization (2011–2013):** Refactored e-ink Kindle software architecture from English-only to 11 languages (including Japanese, Simplified & Traditional Chinese, and Arabic), enabling global adoption and contributing to 70% eBook sales growth.
- **Microsoft Core OS Build Harnesses (2005–2011):** Architected automated build scheduling harnesses in the Core Operating System Division at Microsoft HQ in Redmond, enabling engineering teams to execute complex Windows OS builds on demand.
- **Microsoft Software Test Engineering (1999–2005):** Designed automated test harnesses using scripting and API calls; led complex localization testing for Microsoft BackOffice Suite with zero post-deployment updates due to testing failures.

CREDENTIALS & AFFILIATIONS

M.Sc. in Molecular Medicine

Advanced Research & Scientific Methodology

M.Sc. in Computer Engineering

Systems Architecture & Software Engineering

S.M.IEEE (Senior Member, IEEE)

Recognized Leadership in Engineering Profession