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Nota di contenuto	Front cover -- Half title -- Title -- Copyright -- Description -- Contents -- Testimonials -- Quantum Readiness Expertly Simplified and Decoded -- No Other Resource as Comprehensive -- A Wonderful Creation From the Authors of Shields Up and Cybersecurity Training -- Gives Actionable Steps for Project Managers, IT Managers, and Executives -- An Indispensable Guide to Quantum Readiness -- Complex Topics Masterfully Simplified and Demystified -- A Big Win for Professionals in Cybersecurity -- A Valuable Guide Grounded in Best Practices -- A Fine Approach I Can Use -- Foreword -- What Is Microlearning? -- Microlearning -- CHAPTER 1 Quantum Ecosystem -- Introduction -- Quantum: An Emerging Technological Revolution -- Dual Potentialities of Quantum Technologies -- Transition to a Quantum Ecosystem -- Quantum Technologies -- Classical Computing -- Public Encryption -- Microlearning -- The Algorithms of Shor and Grover -- Quantum Technologies 101 -- Quantum Algorithms -- Quantum Computers -- Benefits of Quantum Computing -- Technical Challenges -- Quantum Cybersecurity Risks -- Quantum Cybersecurity Risk Management -- Start Now Imperative -- Microlearning -- Hybrid Quantum Computing -- Adopting Quantum Technologies -- Quantum Ecosystem Drivers -- Quantum Business Use Cases -- Microlearning --

Quantum Risks -- Microlearning -- CHAPTER 2 Quantum Transition Best Practices -- Quantum Awareness -- Technical Frameworks and Standards Alignment -- Information Technology Infrastructure Library -- ITIL Overview -- Quantum Projects the ITIL Way -- ITIL Service Management for Quantum Technology Management -- NIST Cybersecurity Framework for Quantum Technologies -- NIST Framework Core -- NIST Implementation Tiers -- NIST Framework Profiles -- NIST Cybersecurity Framework Summary -- Other NIST Frameworks -- NIST Cybersecurity Training -- Quantum Transition. NIST Controls -- Quantum Algorithms -- Microlearning -- ISO/IEC 27000 Information Security Management -- Microlearning -- Project Management Frameworks -- Hybrid Project Management -- Adaptive Delivery Approaches -- Agile Project Management: Technology -- Microlearning -- Lean Six Sigma: Process -- Microlearning -- ADDIE Model of Instructional Design: People -- Microlearning -- CHAPTER 3 Quantum Transition Strategies -- Quantum Business Strategy -- Quantum-Inspired Business Vision -- Microlearning -- Quantum Business Case -- External Analysis -- Internal Analysis -- Organizational Quantum Readiness Gap Analysis -- Microlearning -- Quantum Technology Strategy -- Start With a Quantum Technology Vision -- Quantum Technologies Strategy: What and How -- Current State Risk Identification and Analysis -- Target State Identification-An Agile Quantum Ecosystem -- Quantum Technologies Gap Analysis -- Hybrid State -- Minimum Viable Projects -- Quantum Strategy Elements -- End of Service Strategy -- Microlearning -- Quantum Cybersecurity Strategy -- Quantum Cybersecurity Vision -- Quantum Cybersecurity Risk Assessment -- Quantum Risk Identification -- Cryptographic Inventory -- Quantum Cybersecurity Risk Treatment -- Quantum Key Distribution -- Quantum Random Number Generator -- Post-Quantum Cryptography -- Hybrid Cryptography -- Minimum Viable Cybersecurity Foundation -- No-Regret Cybersecurity Projects -- Cryptographic Agility -- Quantum Readiness Maturity -- Governance -- Risk Management -- Security Policies and Procedures -- Quantum Champions -- Microlearning -- CHAPTER 4 Quantum Program Management -- Strategy Implementation Through Program Management -- Project Prioritization -- Quantum Program Management -- Cybersecurity Foundation Projects -- Microlearning -- Quantum Awareness Projects -- Project Management Optimization Projects. Service Management Optimization Projects -- Quantum Business Case Projects -- Quantum Technology Projects and Initiatives -- Cryptographic Agility Projects -- Microlearning -- Post-Quantum Cryptographic Migration Projects -- Post-Quantum Cryptographic Migration Quality Assurance -- Quality Truism -- Proof-of-Concept and Quality Assurance -- Quality Assurance Guides -- Post-Quantum Cryptographic Migration Strategy -- Quantum Enabling Projects -- Quantum Program Management Conclusion -- CHAPTER 5 Quantum Project Management -- Hybrid Project Management for Quantum Transition Projects -- Initiate -- Plan -- Design -- Quantum Cybersecurity Workshop Agenda -- Quantum Design Document -- Design Workshops: Quantum Technologies -- Design Workshops: Foundation Projects -- Design Workshops: Cybersecurity -- Design Workshops: Post-Quantum Cryptographic Migration -- Build -- Test -- Transition to Production -- Close Out -- Quantum Program Governance -- Project Risk Management -- Status Reporting -- Service Management Operations -- Continual Improvement -- Quantum Projects -- Quantum Initiatives -- Microlearning -- Conclusion -- Glossary -- References -- About the Authors -- Index -- OTHER

Sommario/riassunto

Quantum technology interest is accelerating for two key reasons: first, quantum technologies promise transformative capabilities. Indeed, quantum computing is seen as a strategic necessity by the world's leading economies. Second, experts unanimously agree that a cryptographically-relevant quantum computer will have the capability to break classical encryption that keeps our data and transactions private. Thus, organizations are challenged to protect their most sensitive information data and systems before a cryptographically-relevant quantum computer is accessible to hackers despite already over-burdened cybersecurity teams. Quantum Cybersecurity Program Management by Dr Greg Skulmoski and Dr Ashkan Memari is part of a series of books: Shields Up: Cybersecurity Project Management outlines a risk-based approach to cybersecurity project management including technology and process improvement projects. Cybersecurity Training: A Pathway to Readiness outlines best practices in training and instructional design to upskill the organization's people. Quantum Cybersecurity builds upon Shields Up (technology and process) and Cybersecurity Training (people) to provide a program approach to deliver the diversity of quantum projects and initiatives organizations encounter. The authors of Quantum Cybersecurity bring together best practices found in standards and frameworks in a risk-based approach to implementing a quantum program of projects. Tailored for quantum champions, IT security architects, business leaders, project managers, digital leadership, and board members, Quantum Cybersecurity offers actionable guidance. Urgent and early adopters will find a practical guide for a quick start to their quantum projects.