



Emerging Technologies for Business Leaders: Technology Radar and Pilot Portfolio



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Introduction:

Emerging technologies for business leaders arrive as a stream of claims about artificial intelligence, robotics, quantum computing and advanced materials, yet few organisations have a disciplined way to decide which ones deserve attention, funding and people. Budgets drift to fashionable demonstrations while relevant shifts go unnoticed until competitors act on them. This Core Concept course gives leadership teams a repeatable method: scouting signals, grading maturity with readiness levels, placing candidates on an organisational technology radar, scoring value and risk, and funding a balanced set of pilots. Participants produce a Technology Radar and Pilot Portfolio for a case organisation.

Course Objectives:

- Explain the business relevance and limits of artificial intelligence, robotics, connected devices, edge computing, extended reality, distributed ledgers, quantum computing and advanced materials to executive peers
- Grade the maturity of candidate technologies using Technology Readiness Levels and a critical reading of the hype cycle
- Organise technology scouting and signal collection that feed a recurring leadership review
- Build and maintain an organisational technology radar with clear Adopt, Trial, Assess and Hold placement rules
- Score value at stake and risk exposure to balance a portfolio of technology bets and set pilot stage gates
- Establish governance, ethics review and scaling arrangements that move successful pilots into everyday operations

Target Audience:

- Executive team members accountable for technology investment and corporate direction
 - Heads of strategy and corporate development who shape long-term growth options
 - Innovation and emerging technology leaders who run scouting, labs or venture partnerships
 - Digital transformation and enterprise architecture leaders who own technology roadmaps
 - Business unit heads who sponsor pilots and must absorb new technology into operations
 - Senior risk and governance leaders who oversee technology ethics and exposure
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Course Outline:

Day 1: Emerging Technology Landscape and the Case for a Structured View

- Incremental Versus Disruptive Technology and Technology Convergence Patterns
- Business-Level Tour: Artificial Intelligence, Robotics and Autonomous Systems
- Business-Level Tour: Connected Devices, Edge Computing and Extended Reality
- Business-Level Tour: Distributed Ledgers, Quantum Computing and Advanced Materials
- Technology Exposure Baseline: Current Capabilities, Legacy Constraints and Missed Signals

Day 2: Maturity Models and Readiness Assessment

- Hype Cycle Phases and the Documented Criticisms of the Curve
- Technology Readiness Levels 1 to 9: From Laboratory Proof to Operational Deployment
- Absorptive Capacity Checklist: Skills, Data, Infrastructure and Partner Ecosystem
- Evidence Grading Rubric for Vendor Claims, Analyst Reports and Peer Case Stories
- Maturity-Versus-Relevance Grid for Shortlisting Candidate Technologies

Day 3: Technology Scouting and Building the Technology Radar

- Technology Scouting Roles: Internal Scouts, Boundary Spanners and External Networks
- Signal Sources Log: Patents, Research Output, Startup Funding and Standards Activity
- Technology Radar Rings: Adopt, Trial, Assess and Hold Placement Rules
- Radar Quadrant Design Around Business Capabilities Rather Than Tools
- Radar Refresh Cadence, Blip Write-Ups and Leadership Review Forum

Day 4: Value, Risk, Technology Bets and Responsible Scaling

- Value-at-Stake Scoring: Revenue, Cost, Customer and Resilience Effects
- Emerging Technology Risk Register: Security, Lock-In, Workforce and Reputational Exposure
- Portfolio of Technology Bets: Core, Adjacent and Transformational Allocation
- Pilot-to-Scale Transition: Adoption Barriers, Operating Model Changes and Funding Handover
- Responsible Technology Governance: Ethics Review, Decision Rights and Startup Partnership Terms

Day 5: Case Work: Technology Radar and Pilot Portfolio

- Case File: Multi-Site Services Group With Scattered Technology Experiments
 - Case Signal Scan and Readiness Scoring of Twelve Candidate Technologies
 - Case Technology Radar Drafting With Ring Placement Rationale
 - Case Pilot Charters: Hypothesis, Success Measures, Kill Criteria and Stage-Gate Budget
 - Technology Radar and Pilot Portfolio Presentation to a Mock Investment Committee
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Skills You Will Gain:

- Emerging Technology Literacy
- Technology Maturity Grading
- Signal Scouting
- Technology Radar Curation
- Value-at-Stake Scoring
- Technology Bet Portfolio Balancing
- Pilot Stage-Gate Design
- Responsible Technology Oversight

Why Attend This Course:

- Leave with a Technology Radar and Pilot Portfolio for a case organisation, challenged by a mock investment committee
- Replace ad hoc technology demonstrations with a shared vocabulary for readiness, placement and funding decisions
- Question vendor and analyst claims with an evidence grading rubric before budgets are released
- Compare how leaders from logistics, healthcare, energy, finance and public services decide which technologies to back

Conclusion:

Organisations rarely lose ground because a technology was invisible; they lose it because nobody decided in time what to do about it. The course moves from a business-level tour of the main emerging technologies, through readiness levels and a critical view of the hype cycle, to scouting, radar construction, value and risk scoring, bet portfolios, scaling and governance. The final day brings these tools together in a Technology Radar and Pilot Portfolio for a case organisation, ready to present to an investment committee.