



PB INSTITUTE OF RESEARCH AND TECHNOLOGY

P.O Box 21457-00100

Nairobi - Kenya

Mobile: +254 721 214 795

Email: info@pebblesinstitute.org

IT Risk Management for Project Professionals Training Course

Duration: 5 days

On-Site

01 Who Should Attend

- IT Service and Operations Managers
- Systems Implementation and Integration Managers
- Software Development and Technology Team Leaders
- Business Continuity and Resilience Professionals
- Internal Auditors involved in IT projects
- IT Consultants and Project Management Consultants
- Procurement and Vendor Management Professionals supporting technology projects
- Professionals involved in planning, delivering, or governing IT projects

02 About the Course

The **IT Project Risk Management Training Course** provides participants with practical knowledge and techniques for identifying, assessing, responding to, and monitoring risks throughout the IT project lifecycle. The course examines the unique risks associated with technology projects, including cybersecurity threats, technology failure, scope changes, vendor dependencies, resource constraints, data protection, system integration, budget overruns, and project delays.

Participants will learn how to establish effective risk management frameworks, conduct qualitative and quantitative risk assessments, develop risk registers, prioritize threats and opportunities, create mitigation and contingency strategies, and monitor risk exposure throughout project delivery. The course also emphasizes proactive risk management, stakeholder communication, risk governance, and the use of data and digital tools to strengthen IT project decision-making.



PB INSTITUTE OF RESEARCH AND TECHNOLOGY

P.O Box 21457-00100

Nairobi - Kenya

Mobile: +254 721 214 795

Email: info@pebblesinstitute.org

03 Workshop Objectives

- Understand the fundamental concepts and principles of IT project risk management.
- Learn various techniques for comprehensive risk identification in IT projects.
- Master methodologies for performing qualitative and quantitative risk analysis.
- Develop proficiency in planning proactive and reactive risk responses.
- Explore strategies for monitoring and controlling risks throughout the project lifecycle.
- Understand the role of contingency planning and risk reserves in IT projects.
- Learn about effective risk communication and stakeholder engagement.
- Identify common IT project risks (e.g., technical, schedule, budget, security).
- Develop skills in using risk registers and other risk management tools.
- Understand the integration of risk management into different project methodologies (Agile, Waterfall).
- Explore organizational processes and culture that support effective risk management.
- Drive the successful delivery of IT projects by effectively managing uncertainties.
- Position yourself as a leader in resilient and high-performing IT project execution

04 Module Topics

Module 1: Introduction to IT Project Risk Management

- Defining risk in the context of IT projects
- Importance of risk management for project success and organizational goals
- The IT project risk management process overview
- Understanding different categories of IT project risks (technical, operational, external)
- The relationship between risk, uncertainty, and opportunity in IT projects

Module 2: Risk Identification Techniques



PB INSTITUTE OF RESEARCH AND TECHNOLOGY

P.O Box 21457-00100

Nairobi - Kenya

Mobile: +254 721 214 795

Email: info@pebblesinstitute.org

- Brainstorming, Delphi technique, interviewing, SWOT analysis for IT projects
- Root cause analysis for identifying underlying risks
- Checklists and historical data analysis for common IT project risks
- Diagramming techniques (e.g., Ishikawa/Fishbone diagrams)
- Facilitating risk identification workshops for IT teams

Module 3: Qualitative Risk Analysis for IT Projects

- Assessing probability and impact of identified IT risks
- Using risk matrices for prioritizing IT risks
- Developing a qualitative risk register
- Understanding risk tolerance and appetite in IT environments
- Stakeholder engagement in qualitative risk assessment

Module 4: Quantitative Risk Analysis for IT Projects

- Techniques for numerical analysis of IT project risks
- Expected Monetary Value (EMV) analysis
- Decision tree analysis for IT investment choices
- Monte Carlo simulation for schedule and cost estimation
- Interpreting quantitative risk analysis results for IT decision-making

Module 5: Risk Response Planning: Strategies and Actions

- Risk avoidance: strategies to eliminate IT project risks
- Risk mitigation: reducing probability or impact of IT risks
- Risk transfer: shifting IT risk to third parties (e.g., insurance, outsourcing)
- Risk acceptance: planned approach to handle residual IT risks
- Developing contingency plans and fallback strategies for IT scenarios

Module 6: Risk Monitoring and Control in IT Projects



PB INSTITUTE OF RESEARCH AND TECHNOLOGY

P.O Box 21457-00100

Nairobi - Kenya

Mobile: +254 721 214 795

Email: info@pebblesinstitute.org

- Implementing continuous risk monitoring processes
- Tracking identified risks and new emerging risks
- Risk reviews, audits, and performance reporting for IT projects
- Managing changes to risk responses and contingency plans
- Risk re-assessment and trend analysis throughout the IT project lifecycle

Module 7: Technical Risks in IT Projects

- Managing risks related to technology choices, integration, and complexity
- Addressing software development risks: bugs, performance issues, scalability
- Cybersecurity risks and data privacy concerns in IT projects
- Infrastructure and network related risks
- Strategies for technical risk mitigation and quality assurance

Module 8: Schedule and Cost Risks in IT Projects

- Identifying factors leading to schedule delays in IT projects
- Managing budget overruns and cost estimation risks
- Techniques for schedule compression and cost optimization under risk
- Earned Value Management (EVM) for monitoring IT project performance
- Financial contingency planning for IT projects

Module 9: People and Process Risks in IT Projects

- Risks related to team skills, resource availability, and turnover
- Stakeholder management risks: communication, expectations, resistance to change
- Organizational process deficiencies and their impact on IT projects
- Vendor management risks in IT outsourcing or procurement
- Building a positive risk culture within IT project teams

Module 10: Risk Communication and Reporting



PB INSTITUTE OF RESEARCH AND TECHNOLOGY

P.O Box 21457-00100

Nairobi - Kenya

Mobile: +254 721 214 795

Email: info@pebblesinstitute.org

- Developing a risk communication plan for IT project stakeholders
- Effective reporting of IT project risks to management and team members
- Tailoring risk information for different audiences
- Facilitating transparent discussions about IT project uncertainties
- Using dashboards and visualizations for risk status communication

Module 11: Agile and Hybrid IT Project Risk Management

- Integrating risk management into Agile frameworks (Scrum, Kanban)
- Iterative risk identification and response in sprints
- Risk burndown charts and continuous feedback loops
- Managing risks in hybrid project environments
- Scaling risk management for large-scale Agile IT programs

Module 12: Tools and Techniques for IT Project Risk Management

- Utilizing risk registers and risk management software
- Probability and Impact Matrix implementation
- Decision trees and scenario analysis tools
- Software for simulation and statistical analysis
- Templates and best practices for risk documentation

Module 13: Building Organizational Risk Maturity in IT

- Developing a risk management framework for IT projects
- Establishing a Project Management Office (PMO) role in IT risk governance
- Fostering a proactive risk-aware culture in IT departments
- Continuous learning and improvement in IT project risk management practices
- Leadership's role in championing IT project risk resilience