# Advanced R&D Budgeting Forecasting and Control Training Course



21 - 25 Dec 2026

Vienna

5800 € (Per Person)

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## Course Introduction / Overview:

This course provides a comprehensive framework for mastering the financial dimensions of innovation and research. In today's competitive landscape, effectively budgeting for, forecasting the outcomes of, and controlling the finances of Research and Development (R&D) activities is not just a financial exercise but a core strategic capability. This program delves deep into the complexities of R&D financial management, moving beyond traditional accounting to address the unique challenges of funding uncertainty and valuing intangible outcomes. As highlighted by experts like F. Peter Boer in his seminal work "The Valuation of Technology: Business and Financial Issues in R&D", assigning financial metrics to innovation is a critical skill. This training, offered by BIG BEN Training Center, is meticulously designed to equip participants with sophisticated tools and techniques for R&D project valuation, risk analysis, and portfolio management. It bridges the gap between the R&D lab and the boardroom, enabling professionals to make data-driven investment decisions, justify R&D spending, and ensure that innovation efforts deliver tangible financial returns and align with long-term corporate strategy.

## Target Audience / This training course is suitable for:

- R&D Managers and Directors.
- Finance Managers, Controllers, and Financial Analysts.
- Corporate Strategists and Planners.
- Project and Program Managers in technology and innovation.
- Product Development and Innovation Leaders.
- Chief Financial Officers (CFOs) and Chief Technology Officers (CTOs).
- Entrepreneurs and Business Owners in technology-driven sectors.
- Investment Analysts covering technology and pharmaceutical industries.

## Target Sectors and Industries:

- Pharmaceuticals and Biotechnology.
- Technology, Software, and Telecommunications.
- Aerospace and Defense.
- Automotive and Heavy Manufacturing.
- Consumer Electronics and Semiconductors.
- Chemicals and Advanced Materials.
- Energy and Renewable Resources.
- Governmental bodies, research institutions, and public sector agencies.

## Target Organizations Departments:

- Research and Development (R&D).
- Finance and Accounting.
- Strategic Planning and Corporate Development.
- Project Management Office (PMO).
- Product Management and Marketing.
- Operations Management.
- Internal Audit and Compliance.
- Treasury and Capital Budgeting.

## Course Offerings:

By the end of this course, the participants will have able to:

- Develop and implement robust R&D budgeting frameworks aligned with strategic objectives.
- Apply advanced forecasting techniques to predict R&D project costs and potential returns.
- Master financial control mechanisms to monitor and manage R&D spending effectively.
- Evaluate the financial viability of R&D projects using NPV, IRR, and Real Options Analysis.
- Construct and manage a balanced R&D portfolio to mitigate risk and maximize value.
- Communicate the financial value and strategic importance of R&D initiatives to stakeholders.
- Integrate financial metrics and KPIs into the R&D stage-gate and project management processes.
- Conduct sensitivity and scenario analysis for high-uncertainty innovation projects.

## Course Methodology:

The training methodology at BIG BEN Training Center is designed to foster a dynamic and immersive learning environment that prioritizes practical application and strategic thinking. This course moves beyond theoretical lectures to engage participants through a blended approach of interactive presentations, real-world case study analyses, and collaborative group workshops. Participants will work on simulated R&D budgeting and forecasting exercises, allowing them to apply concepts like Net Present Value and Real Options Analysis in a risk-free setting. The facilitator will guide discussions, encouraging peer-to-peer learning and the sharing of diverse industry experiences. Emphasis is placed on problem-solving sessions where attendees tackle common R&D financial challenges, such as budget overruns and project valuation under uncertainty. Continuous feedback is provided throughout the sessions to ensure concepts are not only understood but can be confidently applied back in the workplace. This hands-on, experiential approach ensures that participants leave with tangible skills and a strategic mindset for managing the finances of innovation.

## Course Agenda (Course Units):

### Unit One: Strategic Foundations of R&D Financial Management

- The strategic role of R&D in corporate growth.
- Linking R&D investment to overall business strategy.
- Understanding the R&D value chain and its financial implications.
- Types of R&D costs (direct, indirect, and overhead).
- Introduction to innovation accounting principles.
- The challenge of measuring ROI in long-term research projects.
- Key financial terminology for R&D professionals.

### Unit Two: R&D Budgeting Techniques and Processes

- Top-down versus bottom-up budgeting approaches.
- Zero-Based Budgeting (ZBB) for R&D departments.
- Activity-Based Costing (ABC) for accurate cost allocation.
- Developing the annual R&D operational budget.
- Capital budgeting for R&D equipment and facilities.
- Managing budget cycles and approval processes.
- Software and tools for effective R&D budget management.

### Unit Three: Forecasting and Financial Valuation of R&D Projects

- Forecasting techniques for uncertain R&D outcomes.
- Discounted Cash Flow (DCF) analysis for innovation projects.
- Calculating Net Present Value (NPV) and Internal Rate of Return (IRR).
- Introduction to Real Options Analysis (ROA) for valuing flexibility.
- Using decision trees to model R&D pathways.
- Conducting sensitivity and scenario analysis to assess risk.
- Valuing intellectual property and intangible assets.

## Unit Four: Financial Control, Monitoring, and Performance Measurement

- Establishing Key Performance Indicators (KPIs) for R&D.
- Implementing effective financial control systems.
- Variance analysis. comparing budgeted versus actual spending.
- The role of the stage-gate process in financial control.
- Techniques for managing and reporting on budget overruns.
- Post-launch financial tracking and performance review.
- Preparing and presenting R&D financial reports to management.

## Unit Five: Strategic R&D Portfolio Management

- Aligning the R&D portfolio with strategic priorities.
- Balancing risk and reward across the project portfolio.
- Portfolio mapping techniques (e.g., bubble diagrams).
- Strategic resource allocation and project prioritization.
- Financial modeling for the entire R&D portfolio.
- Communicating the value of the R&D portfolio to the board.
- Long-range financial planning for sustainable innovation.

# FAQ:

### Qualifications required for registering to this course?

There are no requirements.

### How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

## Something to think about:

In an era of rapid technological disruption, how can traditional financial metrics like NPV and ROI be adapted or supplemented to accurately capture the long-term strategic value of high-risk, breakthrough R&D projects?

## What unique qualities does this course offer compared to other courses?

This course distinguishes itself by providing a unique synthesis of rigorous financial discipline and strategic innovation management. While many programs focus separately on R&D strategy or corporate finance, this training course builds a critical bridge between the two, addressing the specific financial complexities inherent in managing high-uncertainty projects. It moves beyond standard budgeting and accounting practices to equip participants with advanced valuation techniques, such as Real Options Analysis, which are specifically designed to capture the value of flexibility and strategic opportunities in R&D investments a topic often overlooked in general finance courses. The curriculum is built around practical, industry-relevant case studies that challenge participants to make difficult financial decisions in realistic scenarios. Rather than just presenting theories, the course emphasizes the art of communicating the financial narrative of innovation to non-technical stakeholders, such as boards and investors. This holistic approach ensures participants develop not only the technical skills for R&D financial control but also the strategic acumen to champion and steer innovation for long-term value creation.