Effective R&D Performance Metrics and KPI Development Training Course



09 - 13 Nov 2026

Boston

7500 € (Per Person)

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Course Introduction / Overview:

What gets measured gets managed, and in the world of R&D, measuring the right things is essential for driving innovation and demonstrating value. This training course is designed to provide R&D leaders, project managers, and finance professionals with tools to develop, implement, and analyze key performance indicators (KPIs) and metrics that accurately reflect the success of their R&D efforts. It goes beyond simple output metrics to focus on measuring the efficiency of processes, the quality of research, and the strategic impact of innovation. We will explore how to build a balanced scorecard for R&D, use data analytics to track progress, and communicate the value of research to the executive team. The curriculum is informed by the foundational work of global academics like Robert S. Kaplan and David P. Norton, whose development of the Balanced Scorecard has provided a framework for measuring performance in complex organizations. This program provides a clear blueprint for turning a subjective research function into a data-driven powerhouse that delivers predictable results and a strong return on investment. BIG BEN Training Center is committed to empowering R&D professionals to prove the value of their work.

Target Audience / This training course is suitable for:

- R&D directors and managers.
- Business analysts and strategic planners.
- Finance and investment professionals.
- Project managers in R&D departments.
- Innovation managers.
- Heads of engineering.
- Quality assurance professionals.

Target Sectors and Industries:

- Technology and software development.
- Pharmaceutical and biotechnology.
- Manufacturing and engineering.
- Consumer goods.
- Telecommunications.
- Venture capital firms.
- Government and public sector R&D departments.

Target Organizations Departments:

- Research and Development (R&D).
- Corporate strategy and planning.
- Finance and accounting.
- Project management.
- Innovation and technology.
- Business intelligence.
- Quality assurance.

Course Offerings:

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

- Develop a strategic framework for R&D performance measurement.
- Identify and select relevant KPIs and metrics.
- Build a balanced scorecard for R&D.
- Use data and analytics to track and report on R&D performance.
- Communicate the value of R&D to senior leadership.
- Conduct a performance audit of an R&D portfolio.
- Link R&D metrics to corporate financial goals.
- Implement a culture of accountability and data-driven decision-making.

Course Methodology:

This training course uses a highly practical and case-based methodology to ensure participants gain actionable skills in R&D performance management. The program incorporates detailed case studies of companies that have successfully used metrics to accelerate their innovation and those that have struggled to prove the value of their R&D efforts. We will use interactive workshops and data analysis exercises to practice critical skills like creating a KPI dashboard, interpreting performance data, and presenting a compelling case for investment. The course includes a hands-on group project where participants will work together to develop a full set of performance metrics for a fictional R&D organization. BIG BEN Training Center believes that hands-on training is essential for mastering this complex field. Our expert facilitators will guide discussions and provide personalized feedback, ensuring that participants leave with the confidence and practical experience needed to drive their organizations to future success through disciplined performance management.

Course Agenda (Course Units):

Unit One: Strategic Foundations of R&D Metrics

- Why is measuring R&D important?
- The limitations of traditional financial metrics.
- The balanced scorecard approach.
- Leading versus lagging indicators.
- Aligning metrics with corporate strategy.

Unit Two: Developing R&D Performance Metrics

- Input metrics (e.g., budget, people).
- Process metrics (e.g., cycle time, project speed).
- Output metrics (e.g., patents, new products).
- Outcome metrics (e.g., revenue, market share).
- The role of qualitative metrics.

Unit Three: Implementing and Reporting

- Building a data collection system.
- Creating effective dashboards and reports.
- Communicating performance to different stakeholders.
- Data storytelling for R&D.
- Using metrics to drive behavior changes.

Unit Four: Linking R&D to Financial Performance

- Valuation of R&D projects.
- Calculating return on investment (ROI).
- Linking R&D spending to market value.
- Forecasting financial outcomes.
- The role of finance in R&D strategy.

Unit Five: Leading a Data-Driven R&D Culture

- Overcoming resistance to measurement.
- Fostering accountability and transparency.
- Using metrics to celebrate success.
- The impact of AI and big data on R&D metrics.
- Developing a personal leadership roadmap.

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:

How can R&D leaders avoid the unintended consequences of metrics, such as discouraging high-risk, long-term research in favor of easily measurable, short-term gains?

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

This training course is a highly specialized program that focuses on the unique and critical challenge of measuring R&D performance, which sets it apart from generic business analytics or finance courses. Our curriculum is tailored to address the specific needs of R&D leaders, providing them with the tools to translate scientific and technical output into clear business results. We go beyond theoretical frameworks to provide a practical, hands-on learning experience through realistic case studies and interactive exercises. The course distinguishes itself by emphasizing not only the analytical skills needed to collect and interpret data but also the leadership and communication skills required to effectively communicate that data to the rest of the organization. By focusing on both the technical and the strategic aspects of performance measurement, this program provides an invaluable skill set that is essential for any professional committed to a successful and innovative organization.