Strategic Portfolio Decisions

Sample Course Syllabus

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A portfolio is a set of related elements or assets that compete for resources and deliver value for an organization. The allocation and management of these resources is a fundamentally different problem from analyzing a single major investment decision, developing a new business strategy, or deciding how to manage cost or schedule risk on a large construction project. The reason for the difference is that one needs to quantify the value contribution from each element of the portfolio, the interactions among elements, and how changing the resource allocation will impact the overall value of the elements and the portfolio. In this course, we examine how these decisions are made for diverse portfolios, including new product and R&D portfolios, personal financial portfolios, and portfolios of businesses.

Participants work through a case exercise to conduct a small-scale asset valuation and make portfolio decisions.

Portfolio Simulation Exercise
Participants engage in a portfolio simulation where they choose a set of R&D projects to fund. As the simulation unfolds, they see how their funded projects perform, and they compare results to the projects they elected not to fund, based on probabilities of technical success and values of commercial success. This exercise introduces many of the portfolio topics that will be explored in subsequent sessions.

Portfolio Management Framework
We introduce six principles of high-quality portfolio management, which guide the organization of people, processes, information, and analysis for effective portfolio decision-making. We also describe a Strategic Portfolio Management (SPM) process that embodies the principles, facilitates good decision-making, and enhances the chances for good results. The SPM process comprises several iterative steps, including portfolio diagnosis, process design, portfolio unit evaluation, information calibration, portfolio decision-making, and tracking of results. These steps can be tailored to fit most portfolio decision-making situations.

Case Study: Product R&D
An industry speaker describes the steps his organization took to implement a new process for value-based portfolio management.

Portfolio Unit Evaluation
The first evaluation step in the SPM process quantifies the value of each portfolio unit. In this session, we describe how to evaluate development success for units coming into market and commercial value for units in the market.
Case Exercise: Project Evaluation
Participants work in teams on a case exercise to compare R&D projects in terms of development success and commercial profitability. They examine the value created by an initial portfolio of projects selected because of their “strategic fit” for the company.

Calibration and Tracking
The calibration and tracking steps in the SPM process are critical to ensure credible, comparable evaluation results and to generate the most value from any type of portfolio. In this session, we discuss the process for reviewing unit evaluation inputs and results and for resolving disagreements. We also describe methods for tracking progress of portfolio elements and monitoring changes in the business environment.

Case Study: Calibration and Tracking
An industry speaker describes how his organization assesses and tracks technical feasibility of products in its R&D pipeline. He explains how the calibration of these assessments is tracked with actual project outcomes.

Portfolio Decisions
The portfolio decision-making step of the SPM process “rolls up” evaluation results; analyzes overall portfolio value, risk, and balance; and informs portfolio-level decision-making. In this session, we describe how to make cross-unit comparisons, prioritize investments, and balance portfolios.

Case Exercise: Portfolio Decisions
Participants continue to work in teams on the case exercise to explore alternative allocations of resources using portfolio analysis software. They explore multiple resource allocations and portfolio configurations, and they compare these to the original “strategic fit” portfolio evaluated earlier in the course.

Case Exercise: Personal Financial Portfolios
Framing is the first step in decision-making. In this session, we use participants’ personal financial portfolios to demonstrate the concept of framing and explore alternative ways to frame portfolio decisions.

Preparation: Diagnosis, Framing, and Design
Key to establishing the right process for portfolio decision-making is diagnosing the portfolio’s characteristics, specifying the portfolio units, and identifying the types of strategic decisions required to manage the portfolio. This provides the foundation for the design of an efficient and effective portfolio management process. In this session, we discuss the preparation step of the SPM, which addresses portfolio diagnosis, framing, and design. (Note: this Preparation step occurs at the beginning of the SPM process. However, we delay discussion of it until this point in the course, so that participants are familiar with unit evaluation and portfolio decision-making.)
Case Exercise: Preparation
Participants work in teams to diagnose various types of portfolios and determine how the portfolio decisions should be framed and the SPM process tailored to each type.

Creating More Value with Alternatives
We typically see dramatic increases in shareholder value of portfolios when portfolio managers explicitly consider alternative allocations of resources. In this session, we identify the values, challenges, and approaches to considering alternatives in portfolio decisions, both at the individual element and overall portfolio levels.

Case Study: Large-Scale Portfolio
An industry speaker describes how portfolio management keeps the lifeblood of his organization’s business -- its innovation pipeline – growing and healthy.

Business Portfolios
In contrast to R&D project portfolios, business portfolios tend to have many fewer portfolio elements – the individual businesses that compose the portfolio. Each business may have much more value at stake than the elements of an R&D portfolio. And there may be fewer apparent interdependencies among portfolio elements, although synergies and divergence are often deeper than most people think. Proactively managing a business portfolio is critically important but challenging, because of the high stakes involved and the potential concentrations of risk that may be difficult to fully identify and comprehend. Organizational incentives frequently clash with the corporate imperative to increase overall portfolio value. In this session, we describe a framework for managing business portfolios at the corporate level, which addresses these many challenges.

Case Study: Business Portfolios with Alternatives
We present a case study that illustrates the complexity of a diverse business portfolio and the tendency to manage the corporation as if there is no uncertainty regarding business results. This case study provides participants the opportunity to see in real life the challenges discussed in the previous session.

Case Exercise: Risk Correlation
Understanding risk compensation and correlation is very important in constructing sound portfolios, in particular in balancing portfolios to manage maximum value and, when possible, minimize risk. In this session, participants work on a case exercise that illustrates this concept.

Case Study: Resource Allocation with Alternatives
We present a case study that illustrates resource allocation with alternatives. In this example, one of the portfolio challenges was the valuation of the portfolio of central services provided by an internal support organization. The challenge was met by pegging the value of services to similar services available in the open market. This approach not only solved the valuation problem, but it generated new alternatives for meeting internal support needs and allowing the service organization to focus its service offerings on those that provided the greatest value to the organization.
Implementation and Summary
We discuss how the SPM principles and process can improve the quality and efficiency of portfolio decisions in participants’ organizations.