Managing Product Platforms: Delivering Variety and Realizing Synergies

Program Details
Companies from Airbus to GE use product platform strategies to deliver more variety to their customers and compete more effectively. For example, Black and Decker uses shared motors and batteries across a range of power tools.

These firms realize quicker new market entry and reduced costs but, in order to do so, they must orchestrate complex, multi-product development projects.

Recent research suggests that many firms fail to earn a return on their platform investments. This work has uncovered that many firms face systemic pressure to diverge from their platform sharing. Several cases studied realized less than half of their platform sharing goals. Are these failures the result of a flawed strategy or poor execution?

This course focuses on helping companies develop strong platform strategies and execution programs, by understanding the managerial levers necessary to operate in complex development environments. The course content draws on case examples from a diversity of industries, and is designed to engage executives, with explicit sessions for sharing and discussing industry experience.

Program Experience
The course teaches the management of product platforms through a combination of lectures, case studies, breakout sessions, and group problem solving.

Case studies covered in the course include Nokia, Lockheed Martin, GE Healthcare, and Volkswagen. Topics covered include the strategic marketing of product families, financial evaluation of platform proposals, building incentives for distributed platform execution, structuring development programs, and supply chain platforms.

Participants will analyze the difference between a company-centric platform strategy and a more open “industry platform” strategy such as at Apple, Microsoft, Google, Facebook, and other companies. We analyze the differences in intent between product platforms and industry platforms, and identify the boundaries of their product platform strategy. Participants will also identify the management levers related to their supply chain, as a function of the boundaries of their platform strategy and the firm’s cost structure.

Takeaways
At the conclusion of this program, executives will be equipped with a clear understanding of:

- Named platform strategies and past corporate examples
- Criteria for evaluating market conditions in which the strategy is appropriate and not
- Identified management levers for use in complex programs
- Key performance indicators for successful platform development
- Benchmark savings and investment sizing data from other firms
- Knowledge and examples of failure modes from past platform efforts
- Differentiate industry platforms, supply chain platforms, and product platforms
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Sample Program Schedule (subject to change)

Day 1
8:30 AM–5:00 PM

1. Overview
Introductions, commonality benefits and challenges, the platform quiz.

2. Choosing a Platform Strategy
Evaluating the market, identifying the customer case for platforming, building a market variant map. Case study: Komatsu

3. Building the Platform Business Case
Sizing the required platform investment, growth projections for niche markets, distributing the benefits among variants and divisions, evaluation of cannibalization risks. Case study: Fiat

4. Identifying Technically Feasible Platforms
Understanding the linchpins of a platform architecture, identifying opportunities for commonality, defining modules and architectural cuts, managing divergence in product platforms. Case study: DG Flugzeugbau

Day 2
8:30 AM–4:30 PM

5. Organizing for Platform Development and Execution
Evaluating your organization’s platform capabilities: mapping decision rights, defining organizational co-investment, and functional ownership of benefits. Shaping incentives in decentralized and centralized platforms. Key roles and responsibilities. Case study: Rail Equipment

6. Using Platform Management Levers
Using financial, technical, and organizational levers to shape platform execution, including reuse databases, supply chain contract strategies, the variant impact matrix, and transfer pricing. Case study: Participant case

7. Evolution of Platform Thinking
Differentiating between product-centric platform strategies and supply-chain platforms versus industry platform strategies that create an ecosystem of innovation partners, and defining the management levers for each strategy. Participant exercise

8. Summary of Platform Management
Capturing action plans for participants

Program Faculty
Please note that faculty are subject to change and not all faculty teach in each session of the program.

Bruce Cameron, Director, System Architecture Lab / Lecturer in Engineering Systems
Cameron is a Lecturer in Engineering Systems at MIT and a consultant on platform strategies. His research interests include technology strategy, system architecture, and the management of product platforms.

Michael Cusumano, Sloan Management Review Distinguished Professor of Management / Professor of Technological Innovation, Entrepreneurship, and Strategic Management and Engineering Systems
Cusumano specializes in strategy, product development, and entrepreneurship in the computer software industry, as well as automobiles and consumer electronics. He teaches courses on The Software Business and Digital Platforms as well as Advanced Strategic Management.

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