

# Rapid Product Development Techniques

## Master-Class

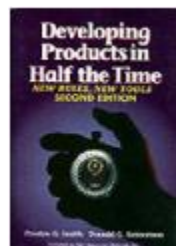


### World-Renowned Product Development GURU

#### DONALD REINERTSEN

I World renowned expert in Rapid Product Development Techniques and Lean Product Development. He has coached managers and teams in product development & innovation worldwide at more than 1000 companies over the past 30 years.

- I Don began pioneering rapid product development techniques in the early 1980 while at McKinsey & Co, where he worked with leading management thinkers such as Bob Waterman, the co-author of "In Search of Excellence".
- I In 1983, Don coined the term "Fuzzy Front End" and wrote a landmark article in Electronic Business magazine that first quantified the value of development speed.
- I Don is the co-author and the most important ideas source of "Developing Products in Half the Time", and continued to advance these ideas much further. This book, now in its third edition with 100,000 copies in use, plus four translated editions. Latest book, "Managing the Design Factory: A Product Developer's Toolkit" is recognized as a powerful and thoughtful application of lean manufacturing thinking to product development.



### Former RPDT Course vs. Adv. RPDT Course

#### RPDT

Good introduction to organizational issue

Good introduction to important issues

Good introduction to quantitative analysis and fuzzy front end

#### Adv. RPDT

Advanced ideas based on behavioral and group psychology.

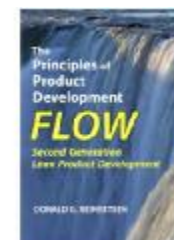
Extensive information on dealing with situations where customers are not sure what they want

Advanced approaches and rigorous screening methods

#### Bonus:

Book two courses, and you will receive a copy of Don's

#### New Book.



**The Principles of Product Development Flow: Second Generation Lean Product Development (Hardcover)**

# Day 1 - Thursday, October 27 2011

## Key Learnings

### I. USING ECONOMIC ANALYSIS

Good business decisions can only be made when we understand the economic impact of our actions. We will discuss how to determine the cost of delay versus other development objectives, and how to use this information to assist the day-to-day management of a project.

- | Modeling development program economics
- | Quantifying the cost of delay
- | Developing trade-off rules for program with multiple goals

## Key Learnings

### II. MANAGING THE FUZZY FRONT END

Commonly half the available development cycle is expended before development even starts. We will discuss what causes this to happen, and the techniques that can be used to achieve faster project starts.

- | Why the predevelopment process is so critical.
- | How to measure the Fuzzy Front End
- | Practical approaches for shortening the predevelopment phase

## Key Learnings

### III. CREATING EFFECTIVE PRODUCT SPECIFICATIONS

Good specifications are crucial, because without them projects become unstable often requiring complete redirection and massive delays. Yet, many product specifications are developed through a highly sequential process that assumes the market will stand still throughout the development process. We will discuss approaches to quickly developing specs that work.

- | Simplifying the product specification process
- | Working with changing requirements
- | The pitfalls of a specification-driven process
- | Going beyond what the customer wants
- | Using application economics to improve specifications

## Key Learnings

### IV. USING PRODUCT ARCHITECTURE

Development cycles can be dramatically shortened by correct system design decisions. However, these decisions are rarely used as a tool to shorten development cycles. We will discuss approaches to managing product architecture that are well suited for rapid development.

- | The role of modular product structures
- | The importance of interface management
- | The benefits of risk concentration

## Key Learnings

### V. STAFFING FOR STREAMLINED PRODUCT DEVELOPMENT

Teams need to be selected with the right combination of skills, the correct cross-functional mix, and certain types of people. We will discuss approaches to team selection that work when developing products quickly.

- | Managing part-time team members
- | Co-location and its alternatives
- | Alternative organizational forms
- | Setting boundaries for the team

## I. DESIGNING FAST DEVELOPMENT SCHEDULES

One of the keys to rapid development is causing tasks to occur concurrently rather than sequentially. This should occur both throughout the development process and within individual stages. We will give examples of how this overlap is achieved and what some of its negative and positive consequences are.

- I The importance of activity overlap
- I The limits of phased development
- I Assessing overlapping schedules using the control triangle

## II. CONTROL SYSTEMS FOR RAPID DEVELOPMENT

Rapid product development requires different control strategies than conventional project management. Team empowerment becomes a critical need. We will discuss practical approaches to managing and controlling rapid development teams.

- I Basing controls on economics
- I Reducing control system delays
- I Reducing low value control activities

## III. CAPACITY MANAGEMENT

Rapid development requires careful management of work queues. Most companies overload their development organizations and ignore these queues. We will discuss the consequences of poor capacity management and the techniques used to avoid these problems.

- I Analyzing development process queues
- I Techniques for controlling queues
- I The fallacy of optimizing efficiency
- I Setting the right level of excess capacity

## IV. CONTROLLING RISK

Rapid product development does not inherently raise overall project risk. Most companies use testing strategies that are not explicitly designed to use time efficiently. We will discuss approaches for reducing the overall risk associated with rapid development programs.

- I Defining technical and market risk
- I Smart testing strategies & test process analysis
- I Accelerating life testing

## V. MANAGING THE MANUFACTURING INTERFACE

Concurrent Engineering - the overlapping of product and process design - is an extremely powerful technique for shortening cycles, but one that sometimes falls short of its promise. We will discuss where opportunities for overlap occur when developing product and processes concurrently.

- I Managing concurrent engineering problems
- I Increasing early manufacturing involvement
- I Increasing early supplier involvement
- I Decoupling product and process development

2011年10月  
27-28日  
上海  
淳大万丽  
酒店

# 快速 产品开发 新法则

## 高级大师班课程



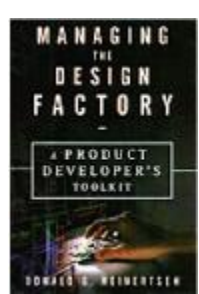
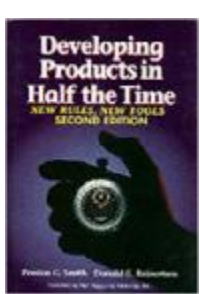
### 国际产品开发领域权威

**DONALD REINERTSEN**

产品开 发研究 领域全球公认的大师级人物。他在快速产品开发和精益产品开发领域的研究已超过30年。持有美国康乃尔大学电机工程学士学位和哈佛商学院工商管理学硕士学位

- 1 1980年就职于麦肯锡国际管理咨询公司期间，Don就同管理学大师Bob Waterman一起研究加速产品开发的核心理念及方法，并在《电子商务杂志》发表了具有里程碑意义的文章，第一次提出了“加速产品开发节奏，缩短一半开发周期”这个具有全新意义的理念，这个理念随后被列入麦肯锡公司内部员工培训必修课。
- 1 Don在1983年首次提出了“模糊产品前端”概念，“模糊产品前端”是缩短开发周期时间成本最初的地方，并且在1985年被各大公司广泛用于产品开发及生产过程。
- 1 在第一本著作《Developing Products in Half the Time》中首次提出了他本人对于产品开发管理许多理念的雏形，这本书目前已经发行了第三版，发行量100000册，并被译成了四种语言版本，包括中文。

1 第二本著作《Managing the Design Factory-A Product Developer's Toolkit》中向读者阐述了自1985年以来，他花了15年的时间实践、修改、精炼而成的理论和方法，这本书已被IBM美国研发总部用作研发人员必读的教科书。



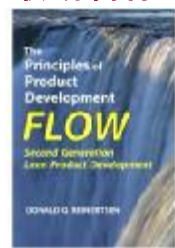
传统快速产品开发课程 VS 高级快速产品开发课程

RPDT
全面的关于组织问题的介绍
全面的关于关键方法问题的介绍
全面的关于模糊前端和量化分析的介绍
高级 RPDT
融入行为和团队心理学先进理念
更多内容讲授如何处理客户无法辨认自身需求时的产品设计开发
结合更多的时间和咨询经验，增加先进的方法及严格的检查措施

### 特别赠送

报名两个课程即可获赠Donald的

### 最新著作



产品开发流程法则  
第二代精益产品开发  
(精装版)

学习要点

### I. 快速产品开发准备 – 经济分析

只有在彻底了解产品开发过程中每一个环节所产生的经济效应，才能作出正确的商业决策。在这一章节中我们将讨论如何计算延迟成本，如何权衡开发速度和发展目标以及如何运用这些信息来帮助我们管理日常项目开发。

- l 运用经济实用的模型
- l 使用“定量法”计算延迟成本
- l 在开发多目标的项目中采用权衡法则

学习要点

### II. 管理产品开发周期中的模糊前端

通常，在一个产品研发过程中，前期浪费的时间几乎占整个开发之间的一半。在这章节中，我们将讨论导致这些不必要浪费的因素与环节，以及如何使用最新评估技术加速产品开发节奏。

- l 前期开发流程的重要性
- l 如何衡量产品模糊前端
- l 缩短前期开发周期的工具

学习要点

### III. 建立有效产品规格

前期严格的产品规划是至关重要的，没有正确产品规格的保证，产品的市场针对性将大大下降，这是导致“延迟成本”最直接的原因之一。目前，产品规格是建立在一种持续的，复杂的市场调研过程之上。在这章中我们会谈到运用实用的工具快速建立有效的产品规格。

- l 简化产品规格流程
- l 在多变的需求中工作
- l 以产品蓝图为驱动的流程弊端
- l 超越客户需求
- l 运用经济评估工具改进现有产品规格

学习要点

### IV. 产品结构

通过对产品前期规划过程的改进能有效缩短产品开发周期。然而，在产品开发周期中这些理念能容易被忽略。在这节中我们将讨论设计合理产品结构以提升速度的实用方法。

- l 模块产品结构的角色
- l 界面管理的重要性
- l 风险集中的收益

学习要点

### V. 合理配置产品开发人员，调整现有模式

产品开发团队是整个新产品开发过程中的核心队伍，合理的人员配置、正确的跨部门沟通与分享、优秀的决策人员是有效缩短产品开发周期的根本。这节里我们会讨论在快速开发产品过程中如何建立团队的实用方法。

- l 管理兼职项目组员
- l 协同合作及其备选方案
- l 备选团队形式
- l 为项目组设立界限

学习要点

### I. 制定快速产品进度表

快速开发的关键是让任务同时发生而不是连续发生。这应该体现在整个开发过程和单独发展进程中。这里我们将用充分的案例来说明这种交错是如何实现的，以及它所带来的正面和负面的结果。

- | 活动交错的重要性
- | 定向开发的局限性
- | 使用“控制理论三角定律”评估交错进度表

学习要点

### II. 控制系统快速开发产品

快速产品开发比传统项目管理更加需要不同的控制策略。其中团队授权变的尤为关键。我们将通过实例来告诉你管理和控制快速开发团队的实用方法。

- | 团队潜能是基于经济学中的一种人员管理策略
- | 减少控制系统延迟
- | 减少低价值的人员管理环节

学习要点

### III. 能力（胜任力）管理

快速开发需要对任务队列有着非常仔细的管理。目前大多数公司都重载他们的开发团队而忽视了其工作队列。这里我们会讨论不善的能力(胜任力)管理所带来的后果以及避免此类问题发生的具体方法。管理的后果和一些能避免此类问题的技术。

- | 分析开发过程任务队列
- | 控制队列的方法
- | 最大化效率的谬论
- | 设立正确的能力(胜任力)级别

学习要点

### IV. 控制项目开发风险

快速产品开发并不会增加整个项目风险。越来越多的公司正在运用设计测试策略进行有效的的时间管理。我们会讨论降低快速开发项目整体风险的方法。

- | 技术和市场风险的定义
- | 巧妙的测试策略 & 测试流程分析
- | 加速寿命测试

学习要点

### V. 控制生产界面

并行工程 - 产品和过程设计的重叠部分 - 是一个缩短开发周期极其强大的方法，但有时也达不到它的预期效果。这里我们会讨论当产品开发和流程开发同时发生时的并行工程的管理方法。

- | 处理并行工程问题
- | 增加早期生产投入
- | 增加早期供应商投入
- | 降低和消除产品和流程开发之间的影响