

# Make your R&D dollars count – Making R&D professionals market savvy (for semiconductor professionals)

## **Synopsis**

Your customer is interested in the benefits from the technology – not technology by itself. Customers need business benefits. They buy technology benefits not features.

The above is simple and well known – but how often does our technical team (product, R&D, technology development engineers etc.) consider this while developing a new product or technology to sell?

This course aims to provide an opportunity for your technical professionals to acquire an insight into the market dynamics prevalent in the hi-tech industry, categorization of technology/product adopters, factors affecting their purchase decisions, modes of market research from a technical perspective and aligning your innovations and technology roadmap with the customers' requirements. All this is done with specific focus to the **semiconductor industry**.

This course will enable your Technical staff to understand the basics involved and effectively work within the team & with the customer to help develop and provide the optimal R&D/product road map and also facilitate marketing the final product for project win and success.

The course is structured into modules. Interactive workshops within the course facilitate in making this an interesting and interactive learning experience. **Participants will be exposed to issues cited from real semiconductor industry experience.** This course will be delivered by a senior VLSI consultant with extensive exposure in technical marketing and managing of microelectronics projects on a global scale.

#### Who Should Attend

- R&D, Chip and IP design, Technology development Engineers
- Customer support engineers
- Technical Marketing engineers (fresh or with a couple of years' experience in the area)

### What You Will Learn

- How to define the Product/R&D/Technology roadmap Aligning your offering with the customers' requirements
- Basic concepts of marketing
- Some underlying concepts of hi-tech market and customers
- Marketing research in hi-tech markets
- QFD (identifying customer requirements and mapping them onto product design process or R&D roadmap)
- Categories of Adopters (both with respect to a product as well as to adopting a new technology)
- Using a platform and Derivative Strategy (what is it and why to use it)
- Technology Paradox and some solutions
- Tips on effective communication
- Effectively support the Sales & Marketing professionals push the product/IP/technology out to the market

# **Prerequisite**

Basic engineering know how. 2-3 years of working experience in the semiconductor industry is preferred.

# **Course Methodology**

This course is conducted in a seminar room. The course will include brief interactive workshops like sessions to encourage participation and facilitate learning. Each participant will receive a hand-out of course material.

## **Course Duration**

2 days (9.30 am - 5 pm)

#### **Course Instructor**

Meenu Sarin

**Director, VLSI Consultancy** 

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Ms. Meenu Sarin is a microelectronics professional with over 24 years' experience in the microelectronics industry across various facets of operations & across geographies like Europe, India, Singapore, Greater China and Australia and with special focus in the semi-custom ASIC environment. She has registered her company, VLSI Consultancy, in Singapore from where she consults offering technocommercial services to the semiconductor industry. She has conducted in-house training courses and public workshops in various countries including Singapore, Malaysia, Hong Kong, India and Americas besides delivering talks in universities. She is also a founding member and an Executive Committee Member of the Singapore Semiconductor Industry Association (<a href="https://www.ssia.org.sg">www.ssia.org.sg</a>)

From 1997-2002, Meenu was a Technical Marketing Manager in STMicroelectronics (STM)/Singapore with focus on Telecom segment. In this role, she was responsible for Business Development and Program Management for STM's semicustom ASIC projects in Asia Pacific. Meenu also worked as a Program Manager in charge of managing various semi-custom projects with customers in the Asia-Pacific Region. Before her move to STM Singapore, Meenu worked at STM India from 1991 to 1997. As a Design Manager for Library Design Group, she was responsible for growing and managing a 30 member strong team involved in design and development of semi-custom digital libraries in various technologies across different platforms as per the market requirements and to support designers in STM's worldwide locations. Prior to this, Meenu had been a Design Engineer for digital library design and development at STM Italy for several years after she received her engineering degree (Computer Engineering) from Delhi Institute of Technology, India in 1988.

#### **Course Structure**

#### A. What is Marketing

- i. Some truths and myths
- ii. P's of marketing
- iii. Components of Profit market share, market size, percentage margin
- iv. Why do people buy

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- v. Competition
  - Analysis
  - Sources of information
- vi. Determining the market price, price-volume relationship
- vii. Achieving profitable innovation
  - Options for biz development (Penetration, development of new services, market development, diversification)
  - Role of marketing in innovation
- viii. Managing the future
  - Planning process
  - Models and techniques SWOT, Growth Share Matrix

#### B. Introduction to High Technology

- i. Uncertainties (Market, Technology and Competitive) and their sources
- ii. Framework for making hi-tech marketing decisions
- iii. Market Pioneering advantages and risks the early adopters and the laggards
- iv. Market orientation in hi-tech markets
  - What does it need
  - Barriers
- v. Market Research in hi-tech markets
  - Aligning market research with the type of innovations
  - Research techniques (empathic and lead user)
- vi. Quality Function Deployment (QFD) and Kano Diagram
- vii. New Product Development

#### C. Understanding Hi-Tech customers

- i. Factors affecting customer purchase decisions
- ii. Categories of Adopters (Innovators, Early Adopters, Early Majority, Late Majority and Laggards) & crossing the chasm; for both a new product as well as adopting a new technology
- iii. Customer Visit Programs
- iv. Product Development and Management issues in hi-tech markets
  - Development of a technology map
  - What-to-sell decision (know-how, proof-of-concept, final product)
  - Product vs. Services
  - Product platforms and Derivatives why use this strategy?
- v. Pricing considerations in hi-tech markets
  - Considerations
  - Technology paradox what is it and some solutions

## D. Technical Marketing - How do we communicate and sell

- i. Selling the next step
- ii. Role of different methods of communication
- iii. How do we sell