

Introduction and Overview

Introduction

The market for advanced technology goods and services is a major part of the complex, fast changing world of today.

This world is one where the economist's concept of "perfect competition" will become the norm. This probability is greatly increased by the growth of electronic communication and commercial transactions facilitated by the World Wide Web. As a client we can access any offering and as suppliers all our competitors can be instantaneously informed of our offerings.

The Web acts as a unique overall equalizer of suppliers and users in a way which was not possible with the markets and business exchanges of the past. Therefore, most of the characteristics of a perfectly competitive market are present. These are the following:

- many suppliers are present on the market leading to supply saturation,
- almost perfect access to information (the "open information society" in time, space and cost),
- little differentiation between the supplies.

This is not new, it has been seen before, for instance with classical products such as oil, books and basic food supplies like coffee, tea and chocolate, in other words,

for commodities. What is new is the speed, driven by globalization and enhanced communication, with which normal products become commodities and the drastic shortening of product life cycles. These trends can be observed already for many products, including information technology products: the telephone, the PC and the mobile phone. So, where is the problem?

The problem is that no supplier can win for long in a perfectly competitive market. It isn't that competitors die; there will remain enough around since people demand the goods and therefore enough suppliers remain in business. However, the point is:

Nobody makes any money!

Why? Because prices inevitably fall not only to cost level but even below and:

Every specific business offering will tend to become a commodity

To survive in a world of perfect competition is not easy. Therefore, we must recognize that the only hope to become a successful company – our legitimate professional goal – in the modern world is to concentrate on a strategy for survival. Without such a strategy, we are going to find ourselves out of the profitable world, while we basically struggle for presence in the market and even continued existence. The survival strategy of the first part of the 21st century – the Web centric world – concentrates on:

- *Innovation* as the basic development and related market pull.
- *Differentiating* our business offering.
- *Selecting* those market segments that are best suited to our company strategy.
- *Positioning* our products/services accordingly.

There is nothing new here: these matters have long constituted the fundamental tasks of marketing and these are the tasks upon which this book concentrates. What is new is that innovation, differentiation, market selection and concentration and positioning are now continuous processes and innovation is increasingly vital. The days of 10 and 20 year product cycles are ending and in an innovative world, marketing becomes – now more than ever – the main business drive.

The basic tenet in the world of advanced technology is that cost tends to become close to zero. As an example, the cost of information is now almost nil; like a commodity, information is effectively free as a result. The only strategy left is one of added-value. Classical vendors (like book publishers) will not find it agreeable.

Take Netscape (1999 figures: 150 people, 150 M\$ of profit, 6 B\$ of stocks). It was already fully based on the sharing of almost free information. Take the example of Reebok in the sports goods sector. It created an “enterprise community” that could enhance the value of the goods.

Moreover, Internet technology offers an intimate way to monitor the relationships with customers. Unfortunately, we lack a suitable business model for the Web operations. For the first time in the history of computing, we appear to work and compete without an *a priori* model of the economics driving us. This holds dangerous trends and observers continue to warn that the current hype around the creation of virtual value (for instance, through valuing start-ups on their high tech markets) cannot hold. The only certainty for the future is:

Uncertainty and incompleteness

Dynamic behaviors and complexity

As such, modern marketers of high technology must permanently deal with this array. Patterns of emergence and adoption of new technologies, their robustness and adaptability, and their extinction are the new keys to survival.

While new technologies constantly make our world appear discontinuous, the Internet is extending its continuity every day. By definition, the Internet is a continuous system: it is enabling a decentralized order with sophisticated means. The Internet offers a strong connectivity in a non-centralized way.

However, as important as it is, as crucial to your survival as it can be, marketing alone is not enough. Innovation is simply vital. It fuels marketing. According to a recent survey covering 800 companies within 26 industry sectors in seven countries,

*“an inextricable link was found between innovation
within an organization and value creation”*

and:

*“companies that generated 80% of their revenue from new products
have typically doubled their market capitalization over five years.”*

Research shows that in all markets the market leaders are the companies who make money (for example, Google, Amazon, Microsoft) and innovation is one of the keys to market leadership.

There can hardly be a better advocate for engaging in marketing the new advanced technologies. This book is about innovation. Innovation is a process that

calls for a global view and where technology fulfills its fundamental role as the principal engine for economic and social improvement. Research grows and develops into social items. As an IBM Vice-President publicly put it:

“Technologies are things of your lifetime; but, as an example, the telephone has now become sociology.”

This book is aimed at putting innovation into practice and at better positioning companies towards their competitors. It leads to thinking in high-tech dynamics. Many classical publications offer classical views of marketing. This is – in the world of high technology – obsolete. The concepts we put into people’s minds must be based on the world of today, not yesterday. The Information Society is here and a Knowledge Society is fast approaching. At its core, high technology is a fact of life and all organizations must be aware of innovation if they are to survive.

Owing to the authors’ wide experience of European industry, programs and industrial projects, the book has been broadly written from a European perspective. However, the authors have an intimate experience and knowledge of the US approaches through their previous work and this colors the content, especially in the innovation area. Some factors which are more prevalent in Europe affect the speed of innovation and technology take-up. These factors include more risk-averse cultures and populations, change-reluctant organizations, multicultural teams, linguistic barriers and geographical zones. The authors have been wrestling with these factors for the last 25 years and know the problems. If European industry is to survive in the 21st century it must develop a more innovative and entrepreneurial culture.

This book is targeted at the executives – whether from the technology or the business side of the enterprise – who are responsible for the entry-to-market and the useful exploitation of advanced technologies. It is aimed at providing a practical handbook for such professionals.

It can be used as a main support for systematic seminars on the marketing of high technology to fast track technical managers, business executives and general marketers in the subject. It is likely that recent graduates will find great value from its practical orientation as it can accelerate their entry into the world of enterprise and position them more dynamically, with profit. Its originality is to bring a market orientation with an approach suitable for specialized professional schools and continued education.

This book offers a fresh perspective through two angles:

- a process view of innovation, in order to obtain a proper knowledge of the issues in marketing innovation,
- a reference frame for putting a marketing plan into practice with high technology in industrial fields.

The over-riding aim of this book is to help the newer, younger generations of managers and professionals to bind technologies and markets by accessing innovative concepts and using them.

Innovation concepts are critical for entrepreneurs and marketers in high technology fields to understand and use. These concepts cover the sociology, economics, dynamics and terminology of the modern world of innovation and the links between them. Doing this requires tools and approaches and the *Magic*Eye* system is an innovative approach to assessing the potential of a research project to meet market needs.

When the high-tech marketer needs to take account of innovation concepts as part of an executable plan, the approaches and models presented in this book generate the minimal checklist for him.

The concepts have been tested and proven through applications of technologies to complicated industrial and commercial activities ranging from water management to banking. The book is applicable to most industrial domains and potentially to all fields where information technologies are applied today. Indeed, innovation happens in every single economic sector and the underpinning process of change is likely to be a most generic one.

What you will not find is a compendium of methods that would work in all cases, because what you need is to assimilate first the way of carrying out marketing for advanced technologies. Neither will you find the actual development of *your* marketing case, nor *your* business plan: this will remain your creation and privilege. However, the steps to make you create your valuable plans and cases are all here and all you need is to go through the chapters.

You will find a discussion of what is new in high-tech marketing and what could not exist before high technologies came to underpin today's modern society. The book provides markers and points of reference on the new needs in a special marketing science fully based on the innovation process in our society.

This book puts innovation into perspective by taking into account:

- technologies and the way they mature,

- people and their attitudes to innovation and change,
- organizations and their marketing plans and strategies in a changing world.

Part 1 deals with “the global view” for marketing high technology and Part 2 gives the actual tools for implementing that view of marketing. The authors believe both parts are essential and complementary.

The book is structured as three thematic parts, supported by six appendices. These are as follows:

– *Part 1* presents a viewpoint of the current situation. We would not fully understand the business world in which we live or its evolution without researching it. This part addresses topics such as:

- the relation between change, competition and innovation,
- the basic models of an innovation cycle; focusing on segmentation and product functionality.

– *Part 2* sets the stage for high technology marketing. Rather than theory or principles, this is a hands-on guide for your steps in the field. Topics addressed are:

- the practice of high technology marketing in the real world,
- goods and services, similarities and differences,
- marketing fundamentals, strategies and targets,
- how to develop a marketing plan and how to use it. What should the stages in your marketing strategy be,
- entering into the sales world in order to realize your plans,
- development of sales plans, recruitment, training and management of sales staff.

– *Part 3* addresses the environmental conditions for success:

- pricing and distribution in the high-tech world,
- access to funds, how you should write a successful business plan, correct timings and attitude; the art of developing partnerships.

A conclusion explains where we are headed for in the next few years and what are the likely new changes that will impact our business world.

Six appendices offer considerable reference material that cover the marketer's sphere of activity:

- conducting market research; familiarization with Pareto's thinking,
- enhancement of sales training and intellectual property rights,
- an original technique for assessing projects.

A list of books and papers which the authors have found useful and which have influenced their thinking is also included at the end.