

Managing New Industry Creation

Thomas P. Murtha, Stefanie Ann Lenway, and Jeffrey A. Hart
269 pages.

Reviewed by Aris Silzars

On opening the covers and leafing through the 269 pages of *Managing New Industry Creation*, the following observations were quickly formed. The "new industry" referenced in the title turns out to be the worldwide flat-panel-display industry, a topic that should be of serious interest to those of us working in displays. Display technologists and business managers worldwide should be able to learn something useful from such an analysis.

The next impression was of the extensively documented reference material that encompasses the last 69 pages of the book. There is a very complete index containing detailed notes on the source of each quote and opinion used, and a complete listing of industry participants interviewed. One of the four appendices is dedicated to a timeline of display-related events starting from 1888 and ending in 2000. This is a carefully documented book.

Authors' Objectives

I can do no better here than to quote the authors, who state, "We have organized the book into nine chapters. Chapter 1 provides a conceptual overview of frameworks for strategic and organizational analysis that we use throughout the book to explain industry evolution. We introduce *continuity*, *learning*, and *speed* as core dimensions of successful strategies in knowledge-driven competition. Chapter 2 provides a narrative overview that will orient the reader in the historical chapters that follow.

"In Chapters 3 through 6, the industry's history unfolds more or less chronologically. Chapter 3 pertains to the period from the invention of basic technologies to the announcement of the first large-format color flat-panel prototypes in Japan in 1988. We show how companies that implemented management and technology processes based on *continuity* and *learning* qualified themselves for leadership. Chapter 4 describes the interregnum between the prototype announcements and companies' decisions to make the costly investments in fabrication lines and manufacturing processes necessary to commercialize the large displays. In the companies that pro-

ceeded, senior managers set aside negative recommendations based on financial models because they envisioned displays as keys to future markets that could not be quantified. Chapters 5 and 6 examine the torrid interaction of product and process innovation in Japan during the 1990s, where companies vied to enlarge the display sizes they could manufacture, while at the same time driving costs down to reach a mass market. *Learning* and *speed* dominated companies' efforts to confront the paradox of increasing investment requirements combined with the need to decrease prices.

"In Chapter 7, we build on the narrative of previous chapters to discuss the frameworks touched on in Chapter 1 in richer detail. Chapter 8 examines issues that affected the industry's diffusion to manufacturing locations outside of Japan, particularly the relative openness of corporate and government policies and practices toward global knowledge-creation partnerships. Chapter 9 offers a conclusion that extends our perspective on knowledge and new industry creation to other industries and brings the flat-panel-display industry narrative up to date."

Evaluation

The narratives of how the various flat-panel efforts evolved, some toward success and others toward oblivion, turned out to be the most interesting and easiest parts of this book to read. Many of the participants mentioned will be familiar to those in the display industry. The value of this book is that they are brought together into an organized whole. If there is a limitation, it is that the authors had to select what to include and what to omit. And to some extent, they were also influenced by their own knowledge and experience base and the contacts that they were able to make during the research phase of this work. It would be impossible to cover every event and every company's decision; therefore, some knowledgeable readers may find that a certain event that they would have considered to be an industry or technology-defining occurrence is not mentioned. However, trying to spot these can in itself make this book interesting reading.

The most challenging part of this book is in the beginning, where the basic concepts of competition and industry evolution are discussed. Here the book takes on a daunting academic style that requires deep concentration and persistence to get through.

In spite of such minor challenges, which may have resulted from the different writing styles of the three authors, the book is an interesting read. The narratives of events and participants provide a nicely organized account of what happened (and did not) in the evolution of the flat-panel-display industry. Should you choose this book as the next one for your bedtime reading, you may wish to start with Chapter 3, read from there through Chapter 6, then proceed to Chapter 9, and with this foundation go for the more conceptual and, at least for me, more difficult topics in the remaining four chapters. Overall, I found the book to be an interesting and valuable contribution to the literature on the worldwide display industry. I recommend it for your consideration and reading. ■

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