Lack of cross-functional understanding and respect.

4. **Physical resources causes**
   - Excessive vertical integration, leading to missed outsourcing opportunities.
   - "Sunk" investment, reluctance to abandon projects.
   - Poor links to suppliers.
   - Poor MIS planning and support, e.g., for computer-aided manufacturing.
   - Inadequate tools, especially testing equipment.

The process for using this list of twenty-four root causes is to study a unit's new product system, its symptoms and its performance. This requires a task force, interviews of key people, working up a shared vision by the people on the task force, setting up of performance measures for the new product process, and assuring that clear new product strategy (corporate, higher-unit direction) is in place.

Second, the task force applies the performance measures, dissects and tracks the projects, and then does the root-cause analysis to find the causes of project problems that exist.

Third, the task force then needs to "identify improvement opportunities, set priorities for resource allocation, mobilize improvement teams, [and] quantify improvement potential." In short, one must *manage* the new product process just as one manages any other important process.


Marketing new products and services in the information and high technology industries requires updated approaches, different from those developed primarily for mass-marketed packaged goods. This article theorizes such a system, based upon a new model of product consumption and adoption. It posits a new set of "rules of engagement" (ROE) to improve the odds of success.

The traditional ROE is built around a market paradigm of survival of the fittest; success of a new product is judged on the basis of short-term return. The proposed ROE would call for survival of the prolific; the spawning of even more adoptable offspring of the original one—line extensions, repositionings, relaunches, spin-offs, etc. This approach attempts to nurture a product family and category synergy, rather than focusing on single isolated products, confined to single categories.

The organizational approach under the traditional ROE is built around SBUs, which often promotes narrow product-based efforts with a staff of unique and narrow specialists. Under the proposed ROE, core competencies involve the collective learning in the organization, notably how to organize various production skills and integrate multiple streams of technologies. This would promote synergies and a reservoir of shared talent rather than isolation and autonomy among SBUs. Understandably, such a paradigm shift would be difficult because it affects the whole corporate culture.

As an example, the audiotext industry followed the traditional ROE, whereas the videotext category (characterized by Compuserve) has evolved under the new ROE. Synergies between related products have been exploited by bundling them.

The proposed ROE therefore calls for a different new product development process. It would be less logical and sequential, less concerned with principles about what happens when a new product or service is launched. Whereas the traditional approach is dominated by an obsession with empiricism, seeking always to establish new and better numbers via projectable data to feed the business case, the new paradigm places far greater emphasis on understanding, meaning, and communication, generating numbers as late as possible. The new process would have four unfolding phases.

**Phase I, category structure design**, replaces traditional concept development. The structure of the relevant category is examined so as to define the category the way consumers, not the trade, define it. As wide a set of data sources as possible is used, including various types of qualitative market research techniques (discussed briefly in the later part of the article). The search is for underlying structures that drive demand.

**Phase II, prototype testing cycle**, replaces the traditional concept test. There is a series of prototype tests, emphasizing early, rapid, and sustained proto-
type encounters with potential users. Highly compensated small samples in early phases would experience widely different versions, in keeping with the emphasis on exploring the product family possibilities; managers would seek ranges of positionings, with high levels of support. Each phase in the cycle would use long post-usage interviews to refine prototype alternatives for the next phase.

Phase III, test market preparation, replaces traditional market trial. Real market support vehicles are used, and a media optimization model is recommended so that smaller market tests can be run concurrently, with alternative support levels.

Phase IV, test markets, replaces traditional rollout. It uses several small test cities rather than a single large site. This is valuable for assessing alternative positioning materials and support levels. These tests yield the numbers needed for formal business case assessment.

As for the market research methods, the author recommends (and explains) a “long interview,” semiotics, neural networks, and psycholinguistic engagement analysis.

Leveraging to Best the Odds: The New Marketing Mind-Set, Adrian J. Slywotzky and Benson P. Shapiro, Harvard Business Review (September-October 1993), pp. 97–107

Three ideas comprise an effective, and badly needed, new tool for improving the effectiveness of new product marketing.

First, marketing expenditures must be seen as an investment rather than as an expense, given the need to find ways to penetrate the defenses of what today is an ever-more formidably entrenched competitor at entry time. But, when introductory marketing costs are evaluated only in terms of their immediate effect, their ratio to competition, costs per unit of sales, and so on, they will never be carefully examined and analyzed. If a new product’s factory were financed like marketing activities are, the firm would build the foundation the first year, add production equipment the second and third years, a service wing the fourth, and so on. Consequently, marketing expenditures rarely accomplish their goal of establishing a solid competitive position based on strong customer relationships.

If allowed an investment approach to new product launching, the marketing strategist can use the second of this article’s key ideas by selecting an initial market target that is rich in potential and capable of long-term development. Example: RTE-ASEA entered the electric transformer market with an undifferentiated product, but saw their marketing effort as an investment, so targeted on GE and Westinghouse customers who were unhappy with their suppliers. In ten years, the newcomer had a profitable 40% of the market. The quick sales dollar is apt to be less expensive, but unstable.

The act of targeting is based on such matters as the long-term marketing goals, the returns a marketing investment might make, and the quality of the achieved market share. Such thinking permits the leveraging of smaller marketing budgets into bigger gains. It is known that early market entrants face lower costs per market share point, but this doesn’t mean it is best to shoot for the largest possible chunk of the new market. It may be better to define what would be the quality share, which segment would be the least costly to maintain against later entrants? And what follow-on new product creation strategy would contribute to this program?

The same problem faces the later entrant. With a little luck and vigorous factual digging, there may a segment that the earlier participants did not protect, and this leads to the third key idea of the article: How can one find the best segment to use for later entry, given a management OK to treat marketing costs as an investment?

Conventional approaches include targeting on established demographic groups, the customers of large competitors, behavioral segments, and the like. But new product marketers should look for three other situations. One is the switchable, a second is the high-profit customer, and third is the customer who will be the share-determiner.

Some switchables are those who are sufficiently unhappy with their current supplier to welcome being courted. Parametric Technology Corporation entered the CAD market by finding a different kind of switchability. They concentrated on ferreting out customers whose new projects had shorter design cycles, where design engineers might be able to make a switch from their IBM and Computervision suppliers. PTC’s CAD sales grew accordingly.

“Acquisition costs for switchables can be one-fifth to one-tenth what it costs to win over a competitor’s loyal customers.” These are “investment-grade” customers, not the chronic switchers.

Second, the high-profit customer is less concerned about price and is less costly to serve. It takes more effort to learn who they are, because accounting systems rarely pinpoint them, even though they are the