best target for a new competitive entrant! Customer-based audits are necessary, putting special focus on the costs of servicing their business.

An interesting twist on this is the firm that enters a market, and then deliberately focuses on *building* high-profit customers, again based on investment spending. FactSet Data Systems, a financial information firm, did this by targeting initially on fifteen to twenty accounts, and spending heavily on each one to build a relationship with it. Knowing the dollars were going to have a return stretched out over many years justified the strategy, and it worked, even taking fewer sales and marketing people than a normal market entry would.

Share-determiners are the third good target group. They are firms whose business will grow and who will be sought after in years to come. Wal-Mart would have been such a firm in its earlier years, but building volume to them would have required more "investment" patience than many firms' shorter-term view will allow. The strategy is, of course, well-known to marketers, but its particular application to new products is that it requires more market research and data analysis discipline than many hurried-up new product marketers can supply. It requires creativity to see growth where others don't see it.

Lastly, the authors put this customer-targeting issue into a life-cycle setting. High-profits are best in the entry stage, share-determiners work well during the growth stage, and switchables can be used during maturity stage. During decline, the firm works with its own high-profit customers, even to adding some late line extensions and product improvements to stretch them as far as possible.

Numerous examples are presented, and some advice is given on how to do it.

Brainstorming Electronically, R. Brent Gallupe and William H. Cooper, *Sloan Management Review* (Fall 1993), pp. 27–36

Many organizations are making effective use of computer software that permits electronic brainstorming sessions (EBS). They have found that traditional brainstorming, though effective in theory, does not pay off very well in practice, for two major reasons: (1) *production blocking*, the inability to get out ideas fast enough when others are also trying to speak; and (2) *evaluation apprehension*, the fear of an idea being ridiculed, resulting in embarrassment or even punishment by others in the group. There is a rich lode of research studies attesting to these problems.

Enter EBS. The technique is demonstrated in the article by a unit of North American Life and Casualty, in the electronic brainstorming facility of a local university. They used a software package named GroupSystems; other available systems are TeamFocus, VisionQuest, and Software-Assisted Meeting Management. The group of seven senior managers, two clerical staff, and one sales representative sat around a U-shaped table, facing a large projection screen. Each seat was provided with a sunken computer screen and keyboard.

The session began with a brief training session by the staff facilitator (five minutes is usually enough), followed by a problem statement from the firm's managing vice president. Tentatively at first, the participants began offering ideas to address the problem, typing each one first on the keyboard, then sending it to the group screen when satisfied with the wording. As ideas began to appear, group participation increased, flowing quickly into traditional brainstorming fluency.

At any time, each participant saw on the individual screen a random set of previous ideas and could scroll through the entire list as desired. An idea could be put in at any time, because there is no need to interrupt someone already speaking (the computer is content to receive, electronically store, and then display as soon as an opening is available). This leads to one of the key advantages—EBS can involve a group scattered anywhere a computer line is available, and participation need not shut down for lunch, sleep, travel or whatever—inputs can come in at any time of day or night. There is no evidence of the first of the two brainstorming problems—production blocking.

And the mix of staff levels in the insurance group demonstrates how the other problem disappears—the clerks and the sales rep need fear no inhibiting reaction to their ideas, and no senior manager need fear ridicule if an idea appears foolish. If the boss is known to favor a particular action, there is no gain from pushing for it. Anonymity is a great idea lubricant.

The authors have researched EBS in five different studies (over 800 people), and consistently find more productivity from it. And the number of high quality ideas is higher also. The gain is less in small groups of two to four people, and greatest in larger groups of over ten. The technique can work with fifty people also, given the electronic entry of ideas.

Getting the ideas, of course, is only part of brainstorming's problems. The long idea list has to be reduced and evaluated. Fortunately, the software has

built in methods for this as well. Methods vary, but essentially, the ideas are first sorted into topic categories (by the software or by participants), duplications culled, rough evaluation/culling by participants, and then serious evaluation of the most worthwhile set. This step usually uses a weighted scoring system, ranking, and ultimate culling to the few that will be implemented immediately; evaluation judgments can also be weighted by the evaluator's professed judgment experience, or by the manager's assigned weights on each individual's scorings. The software even provides for this as well, using implementation boxes, name assignments, implementation steps and dates, and so on. At the end of the meeting (in the case of the insurance firm lasting from 9:00 to 4:30) a full plan of action has been developed to deal with the problem stated at the top of the meeting. And, anonymity has been maintained up to the point of action.

There is a down side, of course, and problems are: (1) the method may be oversold as a cure-all, (2) it requires some keyboarding skill (though this will be less as new entry technology advances), (3) there is loss of power for some senior people, (4) there is less social interaction (though more than one might expect), (5) there is overload during editing and evaluation, (6) the facilities and software are still relatively expensive, and (7) not all topics are suitable (though new product ideation is very suitable).

Controlling the Product Creation Process, Herman Vantrappen and John Collins, *Prism* (Second quarter 1993), pp. 59–73

Today's managements worry about their cross-functional new product team systems. How can they gain the team advantages without losing control over them? Will there be loss of functional excellence? What happens to individual accountability? How much wasted effort is there when tasks proceed in parallel?

The authors believe an appropriate control system should be modeled after the metaphor of mountain-climbers' nightly bivouacs. This means milestones, but definitely not those associated with border crossing points. A mountain-climbing team considers nightly whether its objective was met for that day, whether unanticipated problems appeared, whether supplies and equipment were ready for the next day, whether assistance should be called up from the base camp, and so on. The review is positive and designed to facilitate progress, not to inhibit or restrict it.

So the proposed system for controlling new products builds around those same issues. First, is there a project plan that identifies all milestone events? Second, are the deliverables for each milestone clearly defined in advance? Third, do the review meetings involve people appropriate to the issues, force action on each problem rather than letting it be overridden, and assure that all functional needs are being addressed?

The authors prefer standard frameworks for all projects, with common vocabulary, reduced start-up time spent in defining structures, and the use of benchmarking. But control structures must also reflect natural breaks unique to each situation. Milestone reviews are usually associated with times where functional roles change sharply, where deliverables come due, or where key resource decisions must be made.

No structure of milestones will accomplish much unless it has a clear statement of its deliverables—tangible, quantitative, assessable. It would appear that a mountain-climbing team might have a difficult bivouac meeting if a snowstorm keeps them from assessing just where they are.

The third issue, the proper review process to use at each review meeting, is difficult. "Most companies have far too many boards and committees to steer and supervise the product creation process .... As one board proves ineffective, another one is added." The authors call for a zero-based rethinking of the process.

The article goes on to show various control charts A.D. Little has worked with, and speaks to the traditional questions of controlling tightly enough but not too tightly. Their thoughts are in the new product construct.

Product Adaptability: Assessment and Strategy, Daryl O. McKee and Sid Konell, *Journal of Product and Brand Management* (1993, vol. 2, no. 2), pp. 33–47 (GPL)

Adaptability rather than predictability is emerging as a dominant issue in new product strategy. A product launch is only a tentative commitment to a malleable product, because after launch the item may be adapted to meet changing market conditions. This article presents a framework for systematically assessing product adaptability, which is a firm's ability to change products and their support systems.

The framework consists of two underlying dimensions: *product domain* (*single* versus *multiple* product