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HOWE SCHOOL ALLIANCE FOR TECHNOLOGY MANAGEMENT

Innovation -Tougher Than It Appears

Successful innovation requires structure, process, and deep consumer insights

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The Attractiveness of Incrementalism

This is a challenging time for consumer product companies. Many market categories are generally well-segmented and show limited growth. "Power" retailers have gained enormous market leverage often dictating what products get to shelf and stay there. Store brands are no longer the simple white box offerings that offer consumers barely acceptable quality. Consumers are also more savvy shoppers. They are increasingly pro-active, educated, and demanding. For the past 10 years, many consumer product companies have experienced difficulty achieving sustainable volume-driven profit growth. CEOs have been preaching innovation as the cure for their ailing businesses. But there is a big difference between preaching and doing, and between "doing" and "doing it big."

It is relatively easy to innovate incrementally. Line extensions and quick product modifications can keep brands alive. Such innovations are necessary for sustaining a healthy business. Data gathered from such techniques as focus groups, market segmentation research, expert panels and thought

leaders, need-gap analyses, consumer response centers, and internal brainstorming sessions are all viable sources from which new ideas can spring. Combined with a quantitative concept sort and a volumetric market test, a company can quickly screen incremental new product ideas and select those that achieve an adequate projected return on investment.

Such innovation is comfortable for large, risk averse companies. In a review of new products introduced in the US in 2004 (Information Resources Inc.), approximately 90% were line and brand extensions, whereas 10% were considered substantially new products. The natural attraction of line extensions is largely driven by economics and risk. Although average annual sales of a new line extension (\$24 million) are approximately half that for a substantially new product (\$53 million), it costs considerably less to launch a line extension than a substantial innovation (\$10 million vs. \$25 million). Furthermore, line extensions can be launched more quickly (12 months vs. 15 months), and have a quicker return on investment (12 months vs. 20 months). Finally, incremental innovations are less risky. Approximately 50% of line exten-

As a consumer psychologist with nearly 25 years of experience, my passion is identifying consumer insights. I also help guide the product development process to ensure that these insights are successfully translated into new products offering uniquely differentiated benefits for the jobs consumers are looking to get done.

I have been involved in many successful new product launches, both "incremental innovations" – new flavors, fragrances, and packages that offer limited top line growth – as well as more substantial innovations that resulted in considerable business growth. I have also been associated with launches of products that fell considerably short of meeting sales projections, and with new product ideas that never saw the light of day.

My objective in this article is to briefly share my perceptions on the innovation process, and my conclusions on how innovation can flourish or flounder within large organizations. While my experience is drawn from consumer product companies, I'm sure that many of these conclusions have general applicability.

sions remain on the market for 2 years, compared to only 25% of substantially new products.

Unfortunately, incremental innovation alone brings modest, incremental returns – hardly sufficient to sustain growth. It is much harder to innovate in ways that grow larger businesses at never-before seen rates, especially while "protecting the core." Innovating "beyond the core" can take a business to new heights. However, without separate processes in place that enable innovation beyond the core to be sustained and flourish, such innovation efforts typically fail. There are several reasons.

First, larger companies rely heavily on incremental innovations to maintain brand growth. When growth unexpectedly appears to be less than projected, resources and funding targeted for innovations beyond the core are often diverted to support brand growth. This resource change tips the balance of innovation toward incremental brand innovations and makes larger innovations less likely to happen.

Second, larger companies are typically

impatient when it comes to developing new ideas. There is often an expectation that innovative new products can be developed quickly. While they sometimes can, innovating beyond the core typically requires time. The front end of this process is ambiguous and filled with uncertainty. Often, ideas that are "new to the world" need to be rapidly prototyped and exposed to consumers for their early reaction. This type of innovation is iterative, as new features and capabilities are built into the product idea over the design phase. Longer time-lines are frequently required to turn ambiguous seed ideas into marketplace winners.

Finally, efforts to sustain innovation outside the core often fail because they can require new business models that companies are either unfamiliar with or unequipped to execute. This may include new methods for marketing, selling, or distributing novel product ideas.

The Innovation Game Has Changed

So how can companies successfully innovate both within and outside the core? The road to significant growth through innovation requires new organizational structures, processes to sustain innovation, and deep consumer insights. Perhaps most importantly, it also requires a culture that is driven and reinforced from the top down.

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Many larger companies have recently restructured for growth by creating uniquely distinct cross-functional teams that are responsible for growing the core, and teams responsible for identifying adjacencies and new "white spaces." An example is depicted in Figure 1. These teams each consist of dedicated marketing, market research, R&D, and finance personnel. Some companies have even gone so far as housing each cross-functional team in different buildings so as to maintain their focus and objectives.

Companies have also created separate governance bodies to oversee core growth and growth within white space areas. Each team reports to a different VP – one who oversees core growth and the other responsible for innovation within white spaces. Each VP has a distinct operating budget, growth goals and measures of success. A different governance board reviews new product ideas developed by each functional team.

The board responsible for reviewing and approving innovations within the core relies on standard financial assessments and wellunderstood business models to make decisions. Ideas that are approved move into the company's new product development process. The board overseeing white space activities function as new venture capitalists. Given the unclear business models they frequently face, this board's primary responsibility is to manage risk. They may require the team to report back frequently as new information is obtained. Seed money is appropriated in small increments early in the project to fund "test and learn" studies until a clearer business model is formulated. It is at this point that a larger appropriation is approved and the team moves forward toward final development and implementation. Both governance boards report to the company's management board, which has ultimate responsibility for managing the company's entire portfolio of new product

It is the company culture that is likely the single most important attribute of innovative companies. Support for innovation starts with the company CEO and the management board. It is surprising how many CEOs today do not understand the critical role they play in building and sustaining an innovative culture. Their role is more than lip service and delivering self-serving statements about being an innovative company. It is a very visible commitment to resources, money, and internal support. It is the priority they set to "stay the course" despite unexpected fires that frequently occur within the core. The breadth of an innovative culture can be wide and diffuse, or narrow and focused with limited participation. Both strategies can work. However, without strong leadership at the top, innovation efforts will rarely be sustained.

So how do innovative new product ideas get created in the first place? The field of innovation has matured to the point where

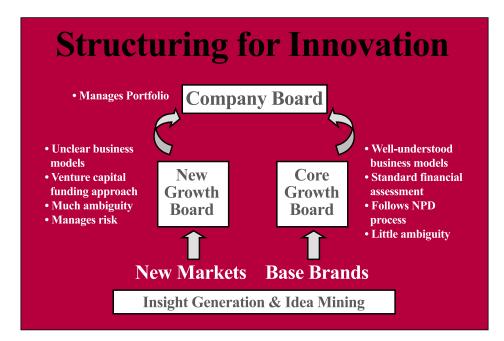


Figure 1. Structuring for innovation requires separating core and new market activities

processes can sustain a rich pipeline of new product ideas. In the front end of the innovation process, five critical stages are necessary:

- Linkage to Strategic Plan. Areas in which innovation initiatives will be targeted must link directly to the company's strategic plan. Coming out of the strategic planning session, areas of concentration are identified, selected, and approved by the management board. This linkage insures that the company will be focused on innovating in the right strategic areas and that the short and long term growth goals within the strategic plan are well understood and communicated.
- Sustained Discovery. The source of all great ideas comes from the development of deep insights. The sustained discovery phase is an immersion into the consumer, technology, and brand equities within which insights can be derived. From a technology standpoint, technology scans are beneficial for understanding advancements in the way companies can deliver possible solutions to consumers. A critical assessment of a company's brand equities can help teams identify new meaning that brands stand for in the eyes of consumers. However, it is the discovery of consumer insights that drive the innovation process. From a consumer standpoint, most companies have a rich array of consumer and market research information to help them jump-start the process. These include market trend analysis and market segmentation research, thought leader input, blog content, and the results of previous brainstorming activities conducted both within and outside the company. Companies will also reevaluate "fallen angels" - those ideas that were previously not pursued for various reasons and now appear more viable or lucrative given recent changes in the market landscape.

All of these idea sources contain content, but they often lack the deeper consumer insight and emotional tonalities that can turn a good idea into a great idea. The strongest single approach a company can take toward strengthening its consumer insight generation program is by implementing observational research as part of the innovation toolbox. This approach requires innovators to get out of the office or laboratory and watch consumers in the field solving problems. Observational research,

sometimes referred to as ethnographic research, can be time consuming and arduous. But its benefits, outlined in Figure 2, far outweigh the time commitment.

The Power of Ethnography

- Emerging Trends
- Unmet Needs
- Unarticulated Needs
- Triggers of Use
- Environmental Interactions
- Compensatory Behaviors
- Customizations
- Intangible Product Attributes

Figure 2. Observation research yields an array of possible insights

Generally, observational research aims to get beyond what consumers say they do. It uncovers what consumers actually do and more importantly, how they do it. Observational research will uncover ways in which consumers are modifying existing products to improve their performance. This can result in the generation of new products or modifications to current products that offer greater consumer benefits. Observational research can uncover how a product is being used outside of its intended role, resulting in new product claims or new ways of positioning a current product. This research approach can often help a team uncover unarticulated, emotional benefits that a consumer is seeking to experience while using a product. Finally, observational research can identify a new array of unmet needs consumers have that can also be the focus for new product ideas.

For example, when observing a new mother deliver fever medicine to a young infant using a dropper, it becomes very evident that she requires more than two hands to do the job. First, the infant needs to be properly positioned in the mother's arms. Next, the mother needs to open the bottle, and squeeze the proper amount of medicine into the dropper. Next, there is a repositioning of the infant so the head is raised to accept the medicine – very difficult to

perform while holding a dropper full of medicine. Once the medicine is delivered, the mother immediately wants to comfort the infant baby by repositioning it yet again. However, she is still holding the dropper, and wishing they could place it somewhere. Moms are reluctant to lay the dropper on a nearby table for fear of germs. On the other hand, it is nearly impossible to put a dropper back into the bottle with one hand because the bottle is small and may tip over. Given this simple observation, a vast array of insights and unmet needs become strikingly evident.

- · Consumer & Technology Platform **Development.** The insights gathered from the consumer, technology, and brand equity areas are synthesized. From this synthesis, major themes emerge resulting in the formation of a number of key consumer benefit platforms (benefits that consumers seek within the target area of concentration) and technology platforms (key technology areas that can deliver those benefits). These major platform areas are then identified, selected, and prioritized based on a projected valuation that each platform is assigned. Within each benefit platform, an array of potential new product ideas is generated, along with accompanying technologies that can successfully deliver the benefit. Using the previous medicine dropper example, careful postobservation debriefing sessions can generate a number of unique solutions that will make the mother's job a more pleasurable one. This may lead to a redesigned bottle that will not tip, or an attachment on the bottle that will hold the dropper just prior to and immediately after delivering medicine so as to free up the mother's hands. The maturity of the technology solution comes into play here as well. If a technology is readily available, the idea may be commercialized in the short term. On the other hand, ideas utilizing technologies that require a longer development path are slotted farther down the product development pipeline.
- Concept Development. Those ideas that are within the core are developed into concepts, tested among consumers, and refined. Leading ideas are selected based upon consumer appeal and fit within the company's new product portfolio. Those ideas that may be new to the company, new to consumers, and outside the company's core businesses are similarly

put into concept form. However, rapid prototyping may also be necessary to generate early consumer reaction to a new product idea never before seen.

· Concept Validation. During this stage, leading concepts and prototypes are being refined. For ideas that are within the core, go-to-market quantitative volumetric testing will project the potential value of the idea. Once placed into the company's portfolio, the idea may be approved by the governance board overseeing core growth and moved into commercialization. For those ideas outside the core and new to company, small test-and-learn studies may be required to determine the best business model to move forward. Once a successful model has been determined, the governance board overseeing white space opportunities may approve the project for commercialization.

Innovate Through the NPD Process

Innovation does not stop once a new idea is identified and approved to move into commercialization. Perhaps the most important area where innovation can be applied at this stage is in product design. The product development process is more than just assembling a product that delivers the obvious benefit for which it is intended. Great companies use innovation during the product development phase to build in higherorder benefits consumers seek but can rarely articulate. In so doing, product development is seeking to create a relationship between the product and a consumer, using a combination of technology, psychology, and art.

Certainly, a great new product must perform the job for which it was selected. The basic "functional benefit" serves as the foundation upon which all other higher order benefits are built. Technology is critical here in delivering the right benefit, in the right way, at the right time. However, deeper consumer insights can help a product development team design an idea beyond pure functionality. One perfect example is Apple's Ipod. While playing music is a basic functional benefit derived

emotionally, and assert a "reason to believe." Often, these take the form of sensory cues. For example, cleaning products that have an overwhelming ammonia aroma, or toothpastes that have a strong minty flavor both connote effectiveness. Lavender fragrances connote relaxation, and can be an effective value-added perceived benefit for use sleep aids. Medicines that fizz, foam, or gush are perceived as fast-acting, and may be viable product forms that reinforce the

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from this product, many higher order benefits were designed into the Ipod that clearly separated it from other music players that were less expensive and readily available. First, its ease of interfacing with Itunes, creating playlists, and cataloging music was a big departure from competitive music players. Second, the user interface on the Ipod itself was intuitive. Third, there was a "coolness" factor in its packaging and design that evoked emotions in both kids and adults like no other product on the market. In general, new products that appeal to consumers both functionally and emotionally have a greater likelihood of being successful.

Aside from the functional benefits that products offer, perceived benefits are also effective elements that can be designed into products. Perceived benefits reinforce the product experience both functionally and benefit being delivered. It is important to consider sensory elements when designing new products to enhance the consumer experience.

Summary

In conclusion, innovation is tougher than it sounds. Successful innovation requires a process for maintaining a healthy pipeline of ideas within the core and beyond the core. It requires governance, leadership, and organization structures that support both growth areas. Successful innovation efforts require a strong consumer insight program that identifies unmet consumer needs and articulates the benefits consumer seek, both functional and emotional. Finally, attention to product design pulls it all together to yield a winning new product.



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