

# THE ROLE OF EGO IN PRODUCT FAILURE<sup>1</sup>

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This paper provides an explanation for persistent new product failure rates that are seemingly immune from developments in marketing research. By defining the concept of *need bias* as the difference between stated consumer needs and management perception of consumer needs and, furthermore, by offering the concept of ego involvement in marketing decision making as the principal factor affecting bias, insight is gained into just how this bias perpetuates itself despite the increasing quality of market data.

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Just three months ago eToys, Inc. moved into its glitzy new 150,000-square-foot headquarters here with a sense of great optimism: The company planned to double its holiday sales over 1999 levels, secure a final round of financing this spring and reach profitability late next year. Chief Executive Toby Lenk was so convinced that his company would triumph that he kept every one of the seven million shares he received in eToys' red-hot initial public offering of May 1999.

...despite a boardroom full of Harvard and Stanford MBAs and blue-chip backers, eToys wildly overestimated the size of its potential market and the speed at which it would materialize.

Source: *The Wall Street Journal*, January 22, 2001

Over the past three decades considerable progress has been made in developing new marketing research techniques. Similar advances have been made in the understanding of consumer behavior. These developments would be expected to lower the failure rate for new products, yet the product failure rate has remained high and constant—some estimates place it at about 85 percent for consumer goods. Of the many factors that influence product success or failure, the only *management* factor that has been discussed is competence, i.e., management's failure to understand consumer needs and wants (Wittink, 1993). But competence would presumably increase with the use of new marketing techniques because that was what the techniques were designed for. What can account for the fact that it apparently does not?

Marketing managers responsible for new product decisions are typically very experienced. They usually have marketing research information about the new products, often of good quality, and they *want* new products to succeed. Perhaps it is this very "want" on the part of managers that partially explains high and constant new product failure rates. Perhaps managers are not so much failing to understand consumer needs as failing to see just how many consumers have this need. Indeed, the most

common public statements by managers about new product introductions are those concerning market size. Many times products that seem to others to be clear niche products are touted by managers as mass-market breakthroughs. It seems as if managers' views are influenced by their closeness to the product.

Research in decision making has consistently shown that ego-involvement, selective perception, wishful thinking and optimism can lead to biases in the direction of wants. Similar results obtain from studies of vested interest, illusion of control, overconfidence and risk taking. Thus, marketing managers are predisposed to think in terms of product success, not product failure. Do marketing managers sometimes overestimate product demand because of the way they interpret evidence for the products they care about most? If so, this tendency would, over time, provide a partial explanation of high and constant new product failure rates. They would remain high due to continual overestimation and not to the lack of success of marketing research techniques.

The extent to which managers are biased in assessing consumer needs and wants for a particular product has not been studied in marketing. Hoch (1988) found that managers were not very good at predicting the interests and opinions of consumers and speculated that experts might be better at predicting in their own niche markets. In related work, Mahajan (1992) studied how overconfidence affects marketing management predictions and found that overconfidence was ameliorated by evaluative feedback and by counterfactual reasoning. Mahajan also found that expertise can result in overconfidence.

The most directly-related marketing work is that of Boulding, Morgan and Staelin (1997) and Biyalagorsky, Boulding and Staelin (1997). The former study finds that, *after* a decision is made to go

ahead with a new product, escalation bias due to commitment to the initial decision can be explained by distortions in processing new data. The latter study provides a theoretical explanation for the impact of initial belief structures on information processing and commitment. While highly relevant, these two studies focus on decision making subsequent to the decision to launch a new product. The focus here is on how decisions to proceed against high odds are made in the first place.

### MARKETING DECISION MAKING

It is very easy to find examples of managers expressing opinions about the chance of product success despite sometimes obvious evidence to the contrary. AT&T, for example, first introduced the picturephone at the 1964 World's Fair. The product was launched in 1970 but dropped in 1973 due to lack of demand. Other companies launched versions of the picturephone in 1982, 1986, 1987, and 1991 and each time the product was a failure. Undaunted, AT&T itself re-launched the picturephone for the home market in 1992 with similar results. AT&T announced plans to introduce the picturephone yet again in 1996 (*Wall Street Journal*, June 19, 1995). While this product's time may come with Internet phones, clearly something has gone wrong in the estimate of market demand.

Similar behavior can be observed with established products. For example, Smith Corona, once the market leader in typewriters, failed to recognize consumers' changing needs for word processing devices and had to file for bankruptcy (*Wall Street Journal*, July 6, 1995). Consumer needs and wants seemed to be discounted by Smith Corona's management as if they were saying "the consumer must be wrong about this." In this case, an overestimate of demand for typewriters was accompanied by an

underestimate of demand for word processing. These management views persisted in spite of other people's views and considerable market evidence.

What is common to these two examples is a misperception of consumer needs and wants. Also common is the applicability of the idea to new and established products. Nevertheless, the focus of this paper is on new products.

## PRODUCT FAILURE

New products that do not fulfill consumer needs or wants will fail. To reduce the chance of failure, product managers use tools to help identify consumer attitudes and preferences. These tools range from simple market surveys to sophisticated conjoint studies and pre-test market models. Managers can examine the findings from these studies or models before making a decision to continue with product development, test market a product, or attempt full-scale commercialization. Since product managers usually have profit and loss responsibility for new product introductions, they are ego involved. If the product is a pet project, they would have even more ego involvement. In this way, the product is personalized.

According to Wittink (1993), new products fail because of management incompetence, economic conditions, competitive intensity, number of new products introduced and types of new products introduced. But they also fail because of management egos.

## EGO-INVOLVED PRODUCT DECISIONS

Ego-involved product decisions are product decisions where the product is viewed as an extension of the self. This involves threats to one's self identity, feelings of importance, personal status and self esteem (Iverson and Reuder 1956). In common language, these aspects of ego involvement can be found in pet projects. Ego involvement has a long history as an explanatory variable and is defined "in terms of a relationship between an individual and a situation which is characterized by the possibility of interference with or deprivation of the need to enhance or to maintain one's feeling of self esteem" (Iverson and Ruder 1956, p. 149). The primary threat to self esteem would be a pet project that fails.

## MANAGEMENT BIAS IN THE NEW PRODUCT CONTEXT

The theoretical starting point is the literature on management bias. If ego-based product decisions are just an instance of decision making subject to bias, then high and constant new product failure rates can be explained by invoking results that hold here as they have held in other contexts. It is unnecessary to prove that managers are biased in certain ways—we already know this—but that the bias is of a special type that fits exactly with an explanation of new product failure rates.

## REALITY IN MARKETS

Reality is what consumers say and do that reflects their needs. Thus the current reality of demand for picturephones is that there is almost none. The current reality of consumer need for video rentals is that it is extremely high. The current reality of need for movies on video disk would be defined by asking a representative sample of consumers to state their need for this product. Of course,

managers only *perceive* consumer needs; hence there is a possibility of differences which would be called a “bias.”

## NEED BIAS

*Need bias* is the difference between stated consumer needs and management perception of consumer needs. “Stated consumer needs” simply means what consumers say. Stated consumer needs are typically found through marketing research studies. Although positive attitudes do not necessarily translate into purchases, we expect that negative results are even less likely to predict product success. Thus, if managers overestimate consumer needs—particularly *low* stated needs—the decision to continue with a new product idea would be one that had a greater probability of leading to product failure.

## THEORETICAL ARGUMENTS

The origin of need bias is ego involvement. Product managers become ego involved with products through simple involvement—since that is their job—and through vested interest from a project being a “pet project.” The intensity of ego influence depends on the level of ego involvement. With zero ego involvement (not possible for a product manager examining his or her own product), there is no ego influence. With low ego involvement (characteristic of being associated with a product), there is low ego influence. And with high ego involvement (where managers have adopted pet projects), there is high ego influence. The crucial impact of ego involvement is on need bias. Ego involvement increases need bias.

The core mechanism of need bias is identical to a theory of perceptual bias. This is well-established in psychological research (Becker 1987; Malone, Russ and Lepper 1985; Lord, Ross and Lepper 1979; Mahoney 1977; Hastorf and Cantril 1954). Briefly, involvement leads to: (1) bias toward preferences, which we know from findings on selective perception and wishful thinking (Babad 1993, 1987; Surlin and Gordon 1976); (2) distortions of evidence toward beliefs, which we know from findings on ego protection or perceptual defense and impression management (Weary 1979; Greenberg 1991; Massad 1979; Senger 1974; Sherif and Sherif 1967; Cialdini 1973; Kassirjian and Cohen 1965) and (3) bias toward past actions or choices, which we understand from cognitive dissonance (Festinger 1957; Freedman and Sears 1965; Wicklund and Brehm 1976), commitment (Stimpson 1970; Brehm and Cohen 1962) and self perception theory (Bem 1967, 1972) . This core mechanism can be taken as given.

Under ego involvement bias is independent of stated consumer needs. Regardless of what consumers say, managers have a tendency to overestimate consumer needs. This tendency is a direct result of managers' ego involvement with products. Under ego involvement managers also are more willing to continue with a product. Because of ego involvement—and the bias it has produced—managers tend to go ahead with products that fall short of stated consumer needs.

Two implications of this view of management bias can be derived. First, if bias is independent of stated consumer needs, product failure rates could remain constant over time. Managers could use better tools of marketing research yielding better product possibilities (in the sense that consumers say products better meet their needs), but still overestimate those needs because of need bias. For example, if consumers said in 1970 that product x was a 3 on a 10-point scale of need satisfaction but managers

saw that product as a 5, it would be possible for new marketing research techniques to produce a product that consumers rated a 5 in 1998 but managers rated a 7, thus preserving a likelihood of product failure.

Second, if bias increases willingness to continue with a product, i.e., to move it ahead in terms of the new product development process, product failure rates could remain high over time. Managers would always be biased and even marginal bias would lead to product failure, particularly in the sense of meeting product goals. By continuously overestimating the market for most products, 85 percent product failure rates would be the norm.

#### Related Dependent Variables and Alternative Explanations of Bias<sup>2</sup>

Two additional factors—vested interest and illusion of control—are likely to be related to the ego involvement. Kahneman and Lovallo (1993), March and Shapira (1987) and others discuss the potential correlation of these factors with ego involvement. People who are ego involved in a situation, the reasoning goes, have a vested interest in the outcome of the situation and tend to feel that they can control the outcome.

Three additional factors—optimism, overconfidence and risk taking—are mentioned in the literature as alternative explanations of bias in decision making. Many of these findings are summarized by Kahneman and Lovallo (1993): individuals who are optimistic about a situation, overconfident and/or risk prone are likely to be biased toward positive potential outcomes of the situation. These factors may be additional reasons why bias occurs although they are not independent of ego involvement.

The ego involvement and overconfidence of eToys CEO Toby Lenk (referenced at the beginning of this paper) is much easier to see—and hopefully predict—in the context of need bias. Apparently what consumers need is a convenient store with low prices at which to purchase most of their toys, i.e., Wal-Mart.

## REALITY-INFLUENCING EVENTS

In the real world, two events can *reduce* the impact of need bias on product failure: self-fulfilling prophecies and hype. Self-fulfilling prophecies (cf. Jussim, 1989, 1990) allow that erroneous beliefs by managers may create their own reality. Managers who are biased toward their own products may take actions that increase the chance of product success. They might spend larger amounts of money on marketing programs for the product such that the products' desirability to consumers increases from what it otherwise would have been. Product success is thus a self-fulfilling prophecy. Ted Turner's tenacity with CNN made a 24-hour news channel a success despite substantial questions about consumer needs including some of his peers who thought this was a "crazy" idea.

A similar effect on product success may be due to hype. Exaggerated or extravagant claims may produce bandwagon effects among consumers. For some product categories, products become "must have" items almost regardless of need. Or, put another way, consumers have at least transient needs for the product. Fad products are an easy example, but other product categories seem to be subject to bandwagon effects too. What is a child's need to see a movie such as Pochahontas when it first comes out? What is that same individual's need to see the movie after most other children have seen it and

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<sup>2</sup> A complete theory of decision making that incorporates all of these variables remains to be developed. What is

everybody is talking about it? The success of the movie Congo during the summer of 1995 was largely attributed to hype not the movie's dramatic quality (*The Wall Street Journal*, July 5, 1995).

### EXPERIMENTAL EVIDENCE<sup>3</sup>

Schultz and Braun (1997) manipulated ego involvement and evidence to show that an “overreach effect” (equivalent to overestimation) can exist in new product situations. They found that ego involvement affected the interpretation of evidence in that greater ego involvement led to greater assessment of consumer need. This is consistent with findings from decision making research.

They also found that the more ego-involved subjects were, the more willing they were to proceed with a product launch, i.e., overreach a target market. Finally, they found that overreaching was independent of the level of evidence.

This latter finding supports the explanation of high and constant new product failure rates: Even if consumer data are getting better all of the time, managers are hopeful for broader product success. But since in a competitive world managers can't always be right, products fail to achieve the predicted level of success.

Remedies for this situation include market-size adjusted consumer data and third-party review. By adjusting consumer data for market size, there would be less of a tendency to overlook size by extrapolating positive individual reactions to mass markets. By using third parties to review research (or new product launch decisions) there would be more of a tendency to be objective. Both of these techniques would make it less likely that target markets are missed by overreaching core consumers.

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important here is how these factors may affect *this* theory.

There are many positive benefits to optimism and involvement. No one wants to work in an organization of pessimists and slackers. But there is a “right” market size for all products. Some are destined to be mass market products and some, niche products. The reach of marketing managers should equal the reach of products. This is the way that consumer needs are truly satisfied.

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<sup>3</sup> Written with Katherine Braun.

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