Introduction
There has been overwhelming discussion about the death of the product management system. A recent review of both the scholarly and business management journals uncovered 50 articles about the product manager (ABI-Inform, 1989-1994). These articles focus primarily on the following problems regarding the system in general and product managers specifically: lack of market-driven focus and a narrow product view; reduction in their power and influence with retailers; short-term perspective and lack of knowledge regarding the external environment; marketing approach misses a global orientation; overuse of quick fixes such as trade promotions rather than brand-building strategies; and proliferation of brand extensions with meaningless benefits.

Low and Fullerton (1994) question if the brand manager can survive – or should survive – unless his/her function is modified significantly.

While marketing academics and business journalists have made these dire pronouncements, marketing departments of major Fortune 1000 corporations are in the midst of a major organizational revolution. A recent survey by the Boston Consulting Group revealed that 90% of these firms have already restructured their marketing departments. Ray Goldberg of the Harvard Business School was quoted as saying that “every company is debating this internally right now, but they’re making changes without big announcements” (The Economist, 1994). The purpose of this research will be to discuss how the product management system is changing, and how firms can best anticipate and manage this change. Organizational change is inevitable; marketing organizations must anticipate and ready themselves for it.

Research purpose
Product management is not dead – it is merely evolving as a result of significant internal and external environmental changes. These changes include corporate downsizing with increased responsibility per manager; as well as fragmented markets and overproliferation of products, combined with poor economic conditions.

The authors believe that enough attention has been given to criticizing the product management system and the product manager. A forward-thinking approach is needed which examines dynamic models of organizational change for product management into the twenty-first century.

There is a significant and important body of work based on evolutionary models which suggests that, just as products do not “die” (e.g. product life cycle), nor do organizational forms.
The evolutionary model of punctuated equilibrium will be introduced to the marketing organization, and applied specifically to the product management system to show how it has evolved over time, and is currently evolving. This model has been adapted to organizational management and empirically verified (Romanelli and Tushman, 1994). Its applications are significant and far-reaching with respect to understanding and managing marketing organizational change. This model will be described in detail, based on the seminal works of Gersick (1991), Romanelli and Tushman (1994) and Tushman and Romanelli (1985). The historical analysis of brand management by Low and Fullerton (1994) will be used to provide the time frames needed to apply the model.

Evolution of the current product management system using the model is then presented, and managerial implications provided for how marketing managers can manage the changes in the system that have already occurred and those to come. Recommendations will be made for marketing organizations that wish to “join the revolution”.

The use of evolutionary models in marketing
There is a long history of biological models in the field of marketing, dating back as far as 1957. The product life cycle was one of the first to be cemented into the field. Biggadike (1981) called the product life cycle one of marketing’s major contributions.

The product life cycle concept itself has gradually changed into a theory of product and market evolution. Reidenbach and Oliva (1981) developed an overall theory of marketing based on biology. Tellis and Crawford (1981) conceptualized the product evolutionary cycle, which uses a biological model to show how products can be kept profitable by adapting to the market environment. Lambkin and Day (1989) proposed a theory of market evolution, which permitted marketers to use a dynamic modelling process to look at long-term patterns.

The complexity of the marketing process lends itself quite well to evolutionary models. In fact, it was recently reported that Fortune 1000 “chieftains talk mistily about marketing evolution” (The Economist, 1994).

The focus of these models, however, has been at the product and market level. An evolutionary perspective can be applied to marketing organizational forms, and this will be described below.

An overview of the punctuated equilibrium paradigm
The seminal works of Gersick (1991), Romanelli and Tushman (1994) and Tushman and Romanelli (1985) will be used here to summarize and describe the paradigm of punctuated equilibrium in detail.

Punctuated equilibrium was first proposed in the field of natural history by Eldridge and Gould (1972). They stated that lineages change very little through most of their history, but then events of rapid change occasionally disturb this tranquility. Evolution is the differential survival and deployment of these changes, or “punctuations”.
Tushman and Romanelli (1985) were the first to apply punctuated equilibrium to organizations:

Organizations do not evolve through a standard set of stages . . . [they] evolve through convergent periods punctuated by strategic reorientations or recreations, which demark and set the bearings for the next convergent period.

This new way of thinking, according to Gersick (1991), has far-reaching implications for organizational practice; about how and when change occurs and then, how it can be managed. This approach is in direct contradiction to the cumulative change theories introduced by Darwin in biology and, more recently, by Low and Fullerton (1994) in marketing. The recent empirical evidence of Romanelli and Tushman (1994) clearly shows that organizational change is rapid and discontinuous.

A definition of punctuated equilibrium in organizations

According to Gersick (1991), punctuated equilibrium suggests that organizations enjoy long periods of stability, or equilibrium. These periods of equilibrium are interrupted by compact, relatively short periods of qualitative metamorphic change, or revolution. This is summarized in a definition, followed by Table I, adapted from Gersick (1991).

Definition:
Organizations evolve through the alternation of periods of equilibrium, in which persistent underlying structures permit only incremental change, and periods of revolution, in which these underlying structures are fundamentally altered. All organizations have a deep structure which consists of core beliefs and values; products, markets, technology, and competitive timing; distribution of power; basic internal structure; and type of control systems.

Deep structure
Each organization possesses what is called a deep structure, which forms its underlying order. It is the deep structure which exists during periods of equilibrium, and limits change. Organizational deep structure has four facets: core beliefs and values; products, markets, technology, and competitive timing; distribution of power; and organizational structure and the nature of its control system.

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
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<tr>
<td>Equilibrium</td>
<td>This is also called a convergent period; a relatively long time span of incremental change and adaption; it is characterized by its duration; strategic orientation; and turbulence. Inertia increases; competitive vigilance decreases; structure frequently drives strategy</td>
</tr>
<tr>
<td>Revolution</td>
<td>This consists of two types, both of relatively short duration, reorientation and recreation. During reorientation, strategies, power, structure and systems are fundamentally transformed. Change is discontinuous. Recreations are reorientations which involve changes in core values and are the most radical of revolutions. Organization inertia decreases, competitive vigilance increases, and strategy drives structure</td>
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Table I. The Punctuated Equilibrium Paradigm
These facets interact with the external environment in ways that maintain and control the organization’s basic structure. Organizations have several fundamental choices they can make: how they will be organized, and what basic activity patterns will maintain their existence. In summary, the deep structure of a system or organization is its very essence – its design and function.

Equilibrium

During periods of equilibrium, which are relatively long, basic organizational activity patterns remain the same; the deep structure is preserved and activities maintained. Usually, incremental adjustments are made to compensate for internal and external environmental disturbances, but these do not change the deep structure. Equilibrium periods are relatively long because it is difficult for organizations to make major changes. Some have limitations in terms of their awareness of the alternatives open to them. There are also motivational barriers to change, specifically, loss of opportunities and/or loss of power struggles. Finally, interdependence among networks may prevent change.

More internally consistent

During these equilibrium periods, organizations become more internally consistent, and inertia increases and competitive vigilance decreases. Deep structure ensures that incremental changes do not occur during equilibrium periods; in other words, structure drives strategy (Tushman and Romanelli, 1985).

Revolution

Periods of revolution cause deep structures to disassemble, reconfigure, and undergo wholesale transformation. There is a breakdown of the old equilibrium; a period of uncertainty about the future, and a new basis around which to form a new deep structure. Revolutionary periods close rapidly once a new deep structure is found. Revolution causes complete breakdown because of the mutual interdependence of a system’s parts and action patterns.

It is usually changes in the internal and/or external environment that cause revolutionary punctuations. Usually, internal growth strains existing organization practices and structures. External environmental changes which are significant include maturation of product life cycles; the legal and social climate; and substitute products and technologies. These shifts in and of themselves may not cause revolutionary punctuations, but they create the need which may precipitate the punctuation.

Two outcomes may result from revolutions: reorientations, where strategies, power structure and systems change; or recreations, which are more radical and involve transformations in core values. During recreations, inertia decreases, competitive vigilance increases, and strategy drives structure (Tushman and Romanelli, 1985).

Punctuated equilibria

It should be noted that punctuated equilibria are not smooth trajectories towards preset ends. The specific composition of an organization and the interaction of its facets with the environment may change unpredictably during revolutionary punctuations.
Punctuated equilibrium in organizations was empirically validated by Romanelli and Tushman (1994), with these two findings reported: organizational transformation is accomplished via rapid and discontinuous changes versus small changes in strategies, structures and power distribution; major environmental changes and CEO succession influenced revolutionary transformations significantly.

Interestingly, and importantly for marketers, changes in short-term performance of an organization did not cause revolutionary punctuations. Their work also suggests that the more quickly a revolution occurs, the better the performance, provided that the revolutionary change was in response to environmental changes.

Application of punctuated equilibrium to the product management system

Assumptions

Punctuated equilibrium will be applied to the product management system to explain the changes occurring today. Several assumptions will be stated here, in order to increase the usefulness of the model.

Product management is viewed as a holistic system, rather than simply the activities of an individual product manager. Much of the criticism leveled has been at individual product manager activities, rather than the system itself. To examine a single manager in such a large and interdependent boundary-spanning system would be too microscopic in orientation. Additionally, systems are dynamic and evolving; and today’s marketers should be interested in how both internal and external environmental changes affect their product management organizations. All organizations will adopt some type of system for managing products that will form part of a company’s organizational structure; but the product manager’s role may evolve into another managerial position with differing responsibilities.

Because the term “brand” generally refers to consumer packaged goods, the terms product manager and product management will be used in this article. The same dynamic environmental forces are affecting all firms with product management systems, and this analysis will have benefits for all types of firms. It is important to note that, over time, most firms do not have a uniform approach to product management; but generally, the deep structure is similar for all who use the system.

A historic approach such as that of Low and Fullerton (1994) is extremely valuable in providing a longitudinal perspective. However, it tends to smooth out the peaks that are revealed through a dynamic, evolutionary approach. Despite this limitation, the data provided by this type of research are quite useful for applying the punctuated equilibrium model, and will be used in this analysis. Dates and events presented in their work will be used throughout the analysis to follow, and acknowledgment of their work is made here without further citation.

Model presentation

This analysis will first describe the deep structures of the product management system over time, the environmental changes leading to the
punctuated revolutions; and the subsequent new deep structures which resulted from the revolutions. Table II outlines the system changes which are presented. It is important to remember that the punctuated equilibrium model is based on biology, and time periods tend to be very long relative to what managers are accustomed to. Rapid changes may occur over a generation, and this perspective must be kept in mind.

The beginnings of the product management system: the CEO/owner as product manager, 1870-1914

Deep structure I
The deep structure at the inception of the brand management system consisted of owners and top managers, who provided the day-to-day direction for their products. Only low-level clerical tasks were delegated. Many of the successful promotions and advertising campaigns of the time period can be attributed to industry giants such as Gillette and Heinz. The influence of powerful leaders such as these fueled the progress of their products, which tends to be characteristic of the way deep structures are created.

Equilibrium I
This deep structure continued for approximately 40 years, with minor perturbations such as consumer resistance to new products, and channel member resistance owing to their own house products. However, these perturbations did not affect the deep structure of how products were managed, which continued to be by the owners for some time.

Internal environmental changes I
Both company growth and product growth were overwhelming during this time period. It became impossible for owners to continue such close involvement with the strategic direction of their products, and concentrate on the business as a whole. This internal change was the primary impetus for the revolutionary period which follows.

External environmental changes I
Many technological changes occurred at this time, such as improvements in the railroads, telegraph, and mail; increased industrialization; improved production; and growth in new retail institutions. However, it is surmised

<table>
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<tr>
<th>Deep structure</th>
<th>Period of equilibrium</th>
<th>Date of revolution</th>
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<tbody>
<tr>
<td>Owner/CEO as product manager</td>
<td>1870 to 1914</td>
<td>Original form</td>
</tr>
<tr>
<td>Functional product managers</td>
<td>1915 to 1930</td>
<td>1915</td>
</tr>
<tr>
<td>The modern product manager: mini general manager boundary spanner</td>
<td>1931 to 1988</td>
<td>1931</td>
</tr>
<tr>
<td>Multi-disciplinary team managers</td>
<td>1989 to present</td>
<td>1989</td>
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Table II. Punctuated equilibrium in the product management system
that the external changes most significant to the revolution in the system were the increased consumer demand and the increasing respectability of advertising. These two changes worked synergistically together to fuel the internal growth of the organization, and thus provided the environment for the coming revolution.

The creation of functional product managers: the revolution of 1915

New deep structure II
The external and internal environmental changes precipitated what can be called the punctuated revolution of 1915. This new deep structure consisted of the training of managers in functional specialties. Organization by function resulted in titles such as “advertising manager” and “sales manager”. The generalist approach in the previous deep structure period was viewed as weak and inadequate. The move from an individual to a group of functional managers was a significant management change. These managers relied heavily on advertising agencies and worked closely with their executives in the performance of their tasks: training salespeople; market planning; research; product testing; package development; promotion and advertising.

Equilibrium II
This period of equilibrium lasted approximately 14 years – significantly shorter than the previous period. There were few, if any, minor perturbations during this period, and under functional product management, products grew and flourished.

Internal environmental changes II
The two key changes which prompted the next punctuated revolution were lack of coordination/cooperation among managers, e.g. no direct responsibility for individual brands. Additionally, company executives realized that new products were being jeopardized by managers who were protecting the old ones. In this case, structure had been driving strategy.

External environmental changes II
The Great Depression certainly had an enormous impact on the change in product management. Prices were driven down by desperate retailers, and consumers grew distrustful of advertising. These were important areas of responsibility for the functional product managers, and they were losing control.

The modern product management system: the revolution of 1931

New deep structure III
As Romanelli and Tushman (1994) have indicated, the appointment of a new CEO is often the impetus for punctuated revolutionary change, and this was certainly the case in 1930 when Richard Deupree was appointed president of Procter & Gamble. The deep structure created under Deupree, the modern product management system, is, in essence, what remained until 1988 as the primary marketing organizational form.

Product managers were the “general managers” for their product. They coordinated all activities with respect to pricing, packaging, product
attributes, promotion and distribution. They were also responsible for creating and executing the marketing plans.

From the very beginning, product managers had a boundary spanning role, as described much later by Lysonski (1985). Success of products in many cases depended on the personal leadership qualities of the product managers, as well as the quality of their interpersonal relationships. Also, their work fitted nicely with the marketing concept, and the 4Ps concept which emerged later. They were frequently in direct competition with other product managers for internal resources. Product managers typically had assistants to help in the performance of their day-to-day activities.

**Equilibrium III**

This deep structure lasted almost 60 years, which speaks for the enduring strength of the system, despite the criticisms it has received. There were many small and large perturbations during this period of time: the Second World War, with both pre-war problems and post-war benefits, as well as the growth of the suburban middle class. Other perturbations which arose, particularly during the 1960s, were implementation problems at some firms; specifically, how to apportion authority and responsibility. Product managers were seen as invading the territory of other functional areas such as finance and production, owing to their boundary-spanning roles. Turf wars arose frequently owing to this activity.

Despite these problems, most firms had what is known as the modern product management system in place during this lengthy equilibrium period. Low and Fullerton (1994) divided this period into two eras: 1931-1949, and 1950 to the present. The authors of this article believe that, based on punctuated equilibrium, no changes in deep structure to the product management system occurred until 1989, despite all the turbulence in the environment internally and externally. The difficulties which arose as the system developed did not alter its deep structure during this time period.

Additionally, it is claimed that product management was not adopted rapidly, but slowly and gradually. However, the historical evidence to that effect is sparse. Given the economic difficulties of the 1930s, it may be that firms adopted product management systems without fanfare. Revolutions, according to Gersick (1991), occur with differing magnitudes. The initial move at Procter & Gamble in 1931 set the stage for the institution of the modern product management system. Also, in the context of evolution, 60 years is not a particularly long time period.

**Environmental changes III**

Overall, the environment was quite favorable, particularly post-Second World War, for the product management system. The 1960s and 1970s saw the entrenchment of the product management system in most large organizations. However, during the 1980s, internal and external changes of tremendous force caused great upheaval and created the impetus for the next revolutionary period. These are discussed together in this section, as they are closely related to one another.

Product extensions and new products, including store brands and generics, were proliferating, leading to serious declines in brand loyalty. Structure was
driving strategy here: the brand management system was designed to develop and launch many brands, and it performed this activity successfully. Owing to technological improvements, retailers possessed information in advance of the manufacturers, and increased their power over which brands would be carried.

The continuing recession of the 1980s caused downsizing at most Fortune 1000 firms, with middle managers, such as product managers, suffering the worst losses. Research by Lysonski (1985) revealed that product managers were extremely uncertain about their role in the organization, as well as how external market events would affect their positions.

One of the most significant events during this period was the appointment of Edwin Artzt to CEO of Procter & Gamble. Again, the appointment of new leadership triggered the next, and ongoing, revolution.

The new product management system: marketing teams and the revolution of 1989

This revolutionary period has been turbulent and quite discontinuous. Various changes in many organizations are occurring as firms institute new marketing systems. As mentioned earlier, 90% of major organizations have reorganized their marketing departments. It is speculated that many firms wish to keep their newly organized marketing structures secret for competitive reasons and, therefore, little has been reported in the business press.

New deep structure IV

The deep structure emerging emphasizes a team approach, regardless of the particular job title or name assigned to individuals or groups managing products. Firms are seeking several key objectives in constructing the new product management system: improved channel relationships; increased market/customer/external environment focus; and greater entrepreneurship and profit/bottom-line accountability. At this point, it is strategy which is driving the marketing structural forms. This period began with the 1989 announcement that Procter & Gamble were shifting to category management, and this was greeted with much attention by the major business journals. In addition to category management, other forms for product management were announced, such as channel management, regional management, and multidisciplinary marketing teams. Each of these forms will be discussed below.

Category management

Category managers are in charge of an entire product group, such as all laundry detergents. They form a mini profit center with spending power and decision-making authority which is designed to get them closer to their customers, both retail and end consumers. Supply-side managers work together as part of a team with category managers, who are responsible for engineering, distribution and purchasing in order to cut costs and product development time (Dumaine, 1989). Colgate Palmolive, Kroeger, Provigo, General Foods, Kraft, and Nabisco also have category management systems (Higgins, 1989a). Efforts are made to encourage a team approach with the category manager at the top. While originally brand managers were to manage only one brand, Procter & Gamble have recently announced major staff cuts. As a result, fewer product managers will be handling more products (Riddle, 1993).
Channel management
Under this system, the channel manager works in tandem with the product managers. The product manager has direct authority for marketing programs in every channel. The same product may be marketed under different names, and the channel manager is responsible for their performance within his/her channel. Black and Decker currently use this system, and integrate it with a team approach (Higgins, 1989a).

Regional/geographic marketing
This structure creates strategic business categories, which are decentralized in nature, and then are divided into sales regions. Each region has brand teams responsible for profit performance, which include brand sales managers and brand promotion managers for specific categories of products. Campbells USA has adopted this system (Higgins, 1989b) and, as with others, emphasizes a team approach.

Trade management
Under this system of product management, companies have created trade marketing groups. They are in-the-field brand builders who work together with company sales staffs and the retail stores that sell their products. ConAgra, a firm using this system, describes these teams as “marketing SWAT teams”, whose mission is to understand their retail customers and make retailers’ missions their own. This strategy has worked particularly well for their Healthy Choice line of products.

AT&T uses a similar approach, and lets stores know when it plans to introduce a new line of products, or discontinue an existing one. Rubbermaid worked closely with its retailers to create “boutiques” in their stores. (Sinsl, 1992).

Multidisciplinary marketing teams
Under this system, each product group has a team which consists of a representative from marketing, sales, production, finance, and R&D. All members of the team are expected to be brand “champions” for their brand or brand group. They have direct decision making power and report to a team leader, frequently a vice-president. Companies such as Pillsbury and RJR are using this system quite successfully (The Economist, 1994).

This evolving team structure eliminates internal boundary spanning, and focusses activities externally, toward key retail customers and consumers. It emphasizes intelligence information gathering, and interface with other groups that influence their product and market activities. It appears that the product management system is about to enter a new equilibrium phase.

Managerial implications and recommendations
One important question raised by the model of punctuated evolution and its application to product management is how this information can be applied by the marketing manager in his/her organization.

Gersick (1991) stated that punctuated equilibrium allows managers to better manage rapid, unanticipated changes in their organizations and the environment; and to initiate change to improve their organization’s performance. How this can be accomplished in the product management context is discussed below.
Managing change

Marketing organizations continue to evolve as this article is written – and at a rapid pace. Team approaches of various types which are externally driven and eliminate bureaucracy appear to be the accepted deep structure at the present time. It does not much matter what you call the organization as long as the team configuration is in place, with a product manager, or a market manager, as a key member of the team.

If this change has already occurred in your organization, the following may assist in managing the changes:

- Develop external environment expertise as it relates to your markets and customers as rapidly as possible, and faster than your competitors. Maintain your vigilance! Your primary focus should be on key accounts and end customers. Wood and Tandon (1994) have noted this as a factor for success in product management today, regardless of the specific team structure in place.

- Determine ways to deliver what your customers want faster than your competitors. Evidence suggests that team approaches together with customer input can cut product development time by 30 to 70% (The Economist, 1994).

- Ensure accountability by all team members; team leaders should be directly responsible for profit results.

Initiating change

Low and Fullerton (1994) encourage marketing organizations, specifically product managers, to become more entrepreneurial. This important advice will be repeated because it relates well to how change can be initiated in your marketing organization:

- Develop product/market teams if they are not already in place – research suggests that the faster change is initiated based on environmental changes, the more successful your product management system will be. Do not worry about titles – concentrate on the structure of the team so that it is profit-accountable and can deliver results.

- Ensure that your focus is external, not internal. Initiate work teams with your customers to deliver your products faster and at higher quality. For example, recent research indicates retailers are actively seeking partnerships with manufacturers (Marketing News, 1995). This is an important opportunity for product management organizations.

- Eliminate internal boundary spanning and replace it with direct reporting whenever possible. Internal boundary spanning is counter-productive and wastes precious managerial time.

- When selecting team leaders, choose those who generate loyalty and possess strong leadership skills. These skills are essential for ensuring that change will be instituted rapidly and enthusiastically.

- Anticipate external environmental changes through quality marketing intelligence, and use this information to improve your performance. Do not get sloppy – your organization cannot afford it; so keep this activity ongoing.

- If a new CEO is appointed, have a marketing organizational blueprint ready. Work with the new leadership to facilitate both overall change and
institute the changes you want in your marketing organization – those that will lead you to external focus, entrepreneurship, and improved customer relationships.

- Remember that revolutions vary in magnitude; small changes can yield large results.

Conclusions
Product management is not dead – it is merely evolving and at a rapid pace. Punctuated equilibrium has provided a useful model for what the face of the product management system will be for the next equilibrium period. Important issues to remember are development of external environment expertise, customer emphasis, team building, and direct managerial accountability.

References

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