

ENHANCING BRAND EQUITY AND REPUTATIONAL CAPITAL WITH ENTERPRISE-WIDE COMPLEMENTARY INNOVATIONS

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In recent years, with rapid obsolescence and short product life cycles, many researchers are dissatisfied with limited product-based conceptualizations of brand equity. Brand values for innovative organizations like Hewlett-Packard, P&G, General Electric, Kodak, Xerox were built over multiple generations of products. In this paper we extend product-based branding to building a more comprehensive "reputational capital" first proposed by Fombrun (1996). Product innovations and market orientation are integrated with organization-wide complementary competencies. Seven research propositions are postulated to include process innovations, quality promise, and intellectual property protection to build brand equity and reputational capital of an innovative organization. Implications for future researchers and practitioners are discussed.

INTRODUCTION

In the emerging networked global economy, innovation and relational marketing are increasingly viewed as important stimuli to economic growth and competitive advantage. Marketing is increasingly driven not by cost-based transactions but by interactive experiences (Welles 1999). In such markets, physical assets such as land, building, plants, and equipment do not fully reflect the true assets of an organization. Instead, intangible assets such as brand, reputation, and intellectual knowledge assets embedded in the organizational processes reflect more closely a firm's true value and source of sustained competitive advantage (Fombrun 1996). For growth and survival, these intangible assets need to be managed strategically. There is an increasing recognition that brands represent a variety of attributes of products, services, and their owners (Barwise 1993; Keller 1993, 1998, 1999; Murphy 1987, 1991). In recent years, many researchers have increasingly focused their attention on reconceptualization of brand equity (e.g., Aaker 1991, 1996a, 1996b; Blackston 1995; Cook 1997;

Kapferer 1992; Meer 1995; Raj 1985; Shocker et al. 1994; Upshaw 1995). Market-perceived reputational capital facilitates such reconceptualization (Fombrun 1996). To gain and sustain competitive advantage in a global market driven by disruptive changes (Christensen and Bower 1996), the reputational capital of an organization needs to be integrated and aligned with the value-adding chain of its innovative capabilities. We fill this need in brand management literature, and extend it for a more sustainable value.

Marketing Perspective of Brand Equity

Aaker (1991) used a marketing perspective to focus on the process by which the value of a brand is created and enhanced. Several tangible and intangible components of brand equity were developed. These included product reputation, image, loyalty, awareness, perceived quality and more. Brand equity was measured by the number of customers purchasing the product regularly, with the support of strong effects of brand recognition. High brand equity is built over extended period of time with high customer value and satisfaction. When customers are highly aware of a brand, they respond favorably to the marketing efforts of the brand's promoters. Brands help differentiate products away

from cost-driven commodities, and make customers willing to pay premium prices for such differentiation. Brands also help develop and introduce new products via line extensions. Brands like Coca-Cola, Levi's, Kodak, Gillette, Goodyear, and Hershey were brand leaders in 1925, and continue to be market leaders in 2000. Once established, the value of a brand seems to be lasting.

There is increasing evidence to support that enhancing advertising budgets can help create brand equity temporarily. But this cannot make up for the loss of customers' trust by other organizational actions such as downsizing (Kerr 1989; Stanton and George 1998). This requires managing brands under conditions of turbulent markets, fast product life cycles, high obsolescence, and time-driven competition (Gehani 1995; 1998).

Many researchers have expressed dissatisfaction with the conventional product-based definition of brand equity (Murphy 1990; Raj 1985). Murphy (1990) proposed that a brand also reflects the customers' perception of its owner, embedding the tangible and intangible values and attributes. These help customers differentiate the branded products from their peers.

Institutional Perspective of Brand Equity

Brands have value that goes beyond individual products (Motameni and Shahrokhi 2000). In many enterprises, managers manage not one but several brands through category marketing and other innovative marketing techniques. Umbrella branding uses one brand for several products (Saunders and Guoqun 1996). At the time an organization is sold, brands are valued as its intangible assets. After the failure and bankruptcy of Pan Am Airlines, the Pan Am brand was auctioned, and had significant monetary value of its own. Sustained investments in marketing, advertising, and R&D competencies, help create a positive market image of a brand and the organization over a period of time.

Many researchers have used a financial perspective of a brand based on its influence on stock market value. Brand equity is sometimes measured by the

premium that firms are willing to pay over and above conventional asset value, to acquire an enterprise with strong brand names. Nabisco sold for 3.2 times its book value because of brands like Ritz Crackers, and Richardson-Vicks was sold for 2.6 times its book value to Procter and Gamble (*Business Week* 1995). Simon and Sullivan (1993) estimate the financial value of brand equity as distinct from the value of the organization's other assets, by discounting the future earnings of a brand to its present values. An alternate method of brand valuation is to estimate the replacement costs. Kapferer (1992) calculates brand equity using two-year weighted earnings attributed to a product. This is called brand strength weight, and is based on a variety of historical factors including advertising expenditures, brand market shares, brand stability, reputation, legal protection, future potential for brand extension, and other factors (*Financial World* 1996).

Firms often use their names on brands to communicate their identity and value to stakeholders other than consumers. This helped Aaker (1991) define brand equity as a set of value-adding assets and value-detracting liabilities related to a brand for its owners. According to Fombrun (1996), an organization's reputational capital is its ability to develop and project its unique value-adding identity. This informs others "what products to buy, what companies to work for, or what stocks to invest in." It is therefore important for managers to develop a consistent and coherent reputation.

FOCUS OF THIS STUDY

Based on the above discussion, in this paper we discuss strategic ways to enhance an organization's brand equity and project its reputational capital by developing its enterprise-wide capabilities to innovate. The domain of value-addition in brands is expanded from promotion and marketing functions to encompass enterprise-wide value-adding chain. The impact of Schumpeterian innovation on constructive-destruction of brands and organizational renown will be reviewed. Various organizational engines of innovation that can be developed in an organization to enhance the value of

its brands and institutional renown are discussed. Significance of product innovation, and its integration with quality promise, process innovation, and protection of intellectual knowledge on reputational capital of an organization will be proposed. Finally, we will discuss limitations of this study, and future implications for researchers and practitioners.

EXTENDING BRAND VALUE TO REPUTATIONAL CAPITAL

New brands and new industries are created by technological innovations, while competitors' brands, old technologies, and industries are destroyed. Austrian-born Harvard economist Joseph Schumpeter noted that competition driven by technological innovations is far more intense than market competition between rivals with similar product offerings competing for market share. Schumpeter (1947, 1950) described "creative destruction" as a historic and irreversible change in the rules and intensity of market competition. Yet, most enterprises and brand managers do not prepare proactively for such disruptive shifts caused by rivals' radical technological innovations (Christensen 1997; Christensen and Bower 1996).

See Table 1 for creative/destructive innovations for many products of daily use in polymer industries. For example, Eastman Kodak built its durable brand by innovating flexible photographic film, and replacing French firms producing hard-to-handle coated glass plates. Xerox gave birth to a great global brand by innovating its dry xerography and destroying the wet ammonia-based copying. Michelin of France built its global renown with radial tire innovation and devastated the bias-ply tire industry in the U.S. Baxter-Travenol gained renown by pioneering the PVC medical bags, and destroying the medical glass bottle industry led by McGaw (Gale 1994).

In the 1950s, Schumpeter (1950) and Galbraith (1956) favored large monopolistic enterprises as the primary engines of innovation in an industrial economy. Large organizations, they argued, have the resources to maintain elaborate R&D facilities,

procedures, and structures to innovate in a systematic manner. They have the acquisition capabilities to innovate and promote new products by bundling these with existing products. Kamien and Schwartz (1982) identify the competitive advantage of large size firms in terms of their economies of scale in R&D activity and innovation. They note that monopolistic market concentration is less likely to stimulate innovation in firms than mildly oligopolistic market structures. Other researchers, including Acs and Audretsch (1988), showed that small size firms (with less than 500 employees) tend to be more innovation intensive than large firms.

TABLE 1
Building Institutional Renown with Creative-Destructive Technological Innovations in Polymer Industries

Pioneer/Innovation	Displaced Rival/Industry
1. Kodak's Flexible Photographic Film	French Coated Glass Plate Industry
2. Bakeland's Bakelite Pool Balls	Ivory Ball Industry
3. B.F. Goodrich's Synthetic Rubber	Southeast Asian Rubber Plantations
4. DuPont's Nylon Stockings	Japanese/Chinese Silk Stocking Industries
5. General Electric's Plastic Bumpers	US Steel's Metal Auto Bumpers
6. Xerox's Dry Photocopier	Wet Ammonia Copying Industry
7. Milliken's Carpet Tiles	Crpet Rolls
8. Michelin's Radial Tires	Uniroyal's Bias Ply tires
9. Head's Composite Oversize Racket	Dunlop's Wooden Rackets
10. Sonoco's Plastic Grocery Bags	Hamermill's Brown Paper Bags
11. Baxter Travenol's PVC Containers	McGaw's Glass Medical Containers

Source: Adapted from Gale, Bradley (1994), *Managing Customer Value*, New York: Free Press; and Gehani, R. Ray (1998), *Management of Technology and Operations*, New York: John Wiley & Sons

Enterprises in high velocity markets, with fast changing technologies, must innovate rapidly to survive and grow. Ghoshal and Bartlett (1998) refer them as innovative enterprises. These organizations

use many different types of innovations. Market innovation involves identifying potential new markets through creative segmentation. These markets are served in innovative ways by first identifying customers' preferences intuitively or empirically. Innovations are classified into different types based on their impact on a firm's capability and knowledge. Henderson and Clark (1990) classified innovations by their impact on capabilities of an organization as radical, architectural, and incremental. Tushman and Anderson (1986) studied the impact of innovations on the knowledge base of an organization, and classified innovations as either competence enhancing or competence destroying. Afuah and Bahram (1995) discussed the impact of innovations on the network capabilities of key suppliers, customers, and producers of complementary and substitute goods.

Building Institutional Capabilities for Brand Equity and Reputation

In December 1994, Intel's brand image faced rising public criticism and media scrutiny because the company failed to fix the floating decimal problem in its Pentium microprocessors. After Intel reluctantly offered a replacement chip, only an estimated 1-3 percent customers requested a product replacement. This suggests that the customers were dissatisfied with Intel's capability to respond to customers' needs, rather than with its product's performance. Collins and Porras (1994), authors of *Built to Last*, found evidence that great product concepts promoted by charismatic leaders might be "negatively correlated" with building a visionary organization with sustained organizational reputation. They noted that reputation and admiration of knowledgeable peers is "not about visionary product concepts or visionary market insights." Organizations build their renown by persistent innovation over extended periods through multiple product life cycles and multiple generations of leaders. These authors noted that reputation is more like "building a clock" or institutional capabilities to innovate, rather than "telling the time" by spending most resources for selling a product.

Institutional capability is defined as a knowledge system composed of complementary competencies, embedded in the different organizational processes (Leonard-Barton 1992; Rumelt, Schendel and Teece 1991). Collins and Porras (1994) suggested that "the continual stream of great products and services from highly visionary companies (with high reputational capital) stems from them being outstanding (innovative) organizations, not the other way around." An organization is a source of its products rather than the outcome of its products. General Electric's innovative establishment of the General Electric Research Laboratory as America's first industrial research laboratory, produced a series of innovative brands. The original direct current (DC) electric system, created by GE founder Thomas Edison, lost market to the alternating current (AC) electric system innovated by competitor George Westinghouse. Yet GE developed its high brand equity and reputational capital over time based on its innovative institutional capabilities.

Organizations with high reputational capital may go through setbacks in performance due to internal or disruptive environmental factors (D'Aveni 1999). But the institutional capabilities of these organizations display resiliency to bounce back from adversity. Organizations with reputational capital evolve and develop innovative new businesses, yet remain guided by their core purpose beyond their products and profits. New products, new operating processes, and new business strategies are innovated while preserving their core values and purpose. For example, Hewlett Packard uses its enduring "HP Way" while leading or adapting to the disruptive changes in technology and markets (*Hewlett Packard Annual Report* 1995). Many innovations of renowned organizations have radically changed our quality of life, and become part of our society. Consider 3M's Post-it notepads, Motorola's cellular phones, Sony's Walkman, and many more.

Essentially, reputational capital is built by an organization integrating and aligning its core values and purpose into its value-adding innovating competencies and everything else that the organization does. Alignment implies that the

different innovative competencies and components of an organization are synchronized with the organization's core values and purpose. This improves the perception and reputation of the organization in the eyes of its customers, investors, and others. Thus, we propose the following.

Research Proposition #1: Organizations with high customer perceived overall institutional innovation would accumulate high reputational capital and brand equity over time.

ENGINES OF INNOVATION TO BUILD REPUTATIONAL CAPITAL

The emerging global economy demands new comprehensive and more agile models for managing brand value for technology-driven enterprises (Gehani 1995). A key to development and introduction of value-adding product innovations lies in building complementary organizational capabilities (Teece 1986). Sustainable reputational capital is built by building organizational capability that helps integrate and align these multiple value-adding competencies (Gehani 1998). These innovative competencies are discussed in detail below.

Abernathy and Utterback (1978) studied the automotive industry, and related the different types of innovation to the different stages in the evolution of auto technology. They proposed that product innovations proliferate in the emerging stage of a technology. As a technology evolves beyond its dominant design standard, heavy investments in capital equipment and process innovations overtake product innovations. Further growth and evolution of technology require building organizations' institutional capabilities, and integrating a systemic alignment between product innovations and process innovations. In the following section we will develop a number of research propositions for four major types of innovations an organization can develop to enhance its brand value and reputational capital. Implications of these for future research and managerial actions will be presented.

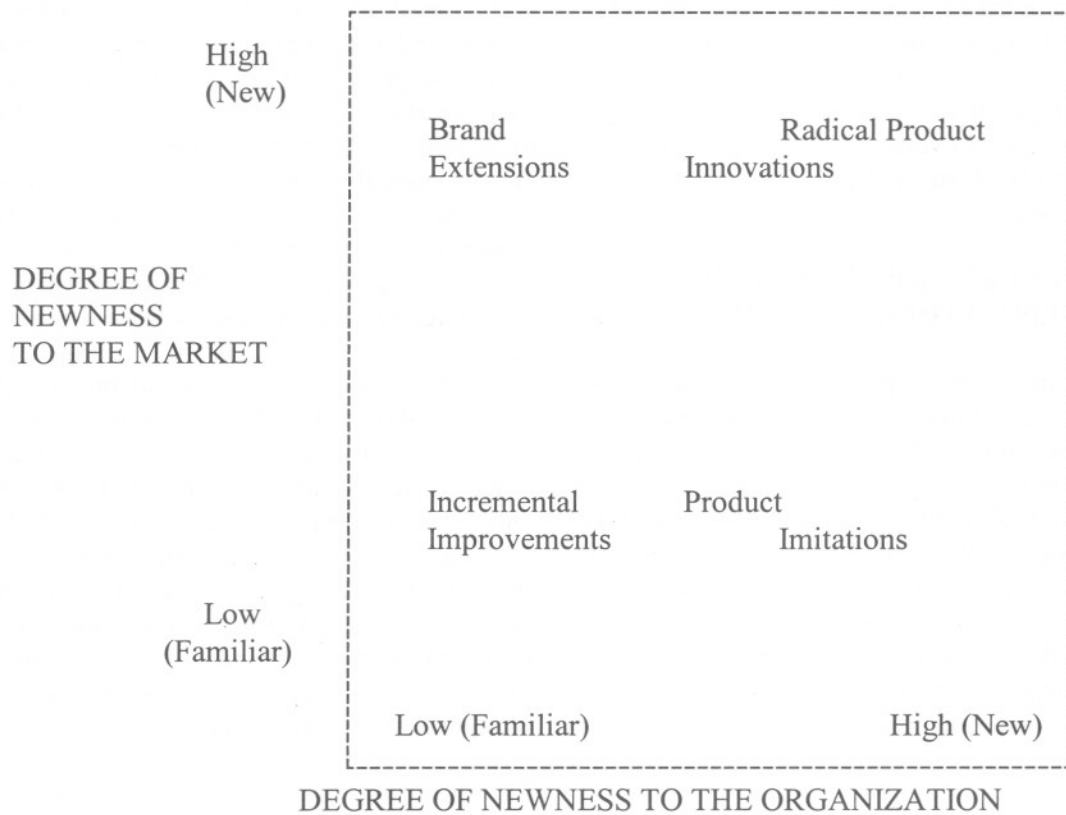
PRODUCT INNOVATION AND MARKET ORIENTATION

To gain competitive advantage, some enterprises have focused their attention on the market and customer end of their primary value-adding chains. These enterprises focus their efforts on meeting their customers' needs to gain high customer satisfaction and trust. They switch from transactional selling of their products to relationship marketing with customers over extended time. Product innovation is defined as the process of identifying innovative unmet customer wants, and embedding new technologies in unique new product features (Johne 1999a, 1996b; Gehani 1992). Federal Express radically changed the document delivery industry by innovating the way they guaranteed "absolutely, positively overnight" service to their customers (Gehani 1998). Fred Smith founded Federal Express in March 1973, based on an innovative customer-driven service concept he innovated while he was a Yale student in 1965. In 1997, FedEx became the world's largest express transportation brand with 530 aircrafts and 37,000 trucks, delivering 2.5 million packages overnight for 750,000 customers.

The developing "capabilities" approach in the strategic marketing literature (Day 1994) links product innovation to market orientation. Booz, Allen and Hamilton (1982) has noted a typology for product innovation. This is based on the degree of newness to firm and the degree of newness to market. The new products span from incremental improvements to brand-line extensions, imitation products, and radical product innovations (See Figure 1).

Procter & Gamble made 70 product improvements to its Tide brand laundry detergent since its launch in 1956 (Henkoff 1996; Wilke and Zaichkowsky 1999: 12). Brand and product imitation involves integrating the "look and feel" of a leading brand. Schnaars (1994) proposes that value-adding product imitation can be used as a major strategic tool for latter entrants to seize markets from the first mover pioneers. Imitators escape from investing the needed resources on risky development and

FIGURE 1
New Products by Degree of Newness to an Organization and a Market



Source: Adapted from Booz, Allen, and Hamilton. 1982. *New Product Management for the 1980s*, New York: Booz, Allen, & Hamilton, Inc.

launching of uncertain innovations. On the other hand, brand leaders lose significant value as a result of such confusing imitations. McDonald's brand trademark is imitated in China by a fast-food noodle store with employees wearing uniforms with a golden-arches look-alike logo. McDonald's management complains that such imitation can confuse their customers' perception of their global brand. Other products, such as Big Mac wine bottles, McBeans coffee beans, and McCondoms have tried to imitate the global brand recognition of the company. To protect its brand from such imitation, McDonald's has tried to register a series of words with "Mc" prefix (*Vancouver Sun* 1992).

The innovative products have to be continuously updated and re-innovated to sustain owners' market leadership. Isolated product innovation for its own sake (Mitchell 1996), adding more features and introducing many variants, is referred as "innoflation." This adds limited brand equity. Some product features are incrementally improved, whereas others may be changed radically to meet the needs of the target customers. Breakthrough innovations and incremental improvements in products are considered significant for sustained growth (Booz, Allen and Hamilton 1982).

Many researchers (e.g., Deshpande, Farley and Webster 1993; Kohli and Jaworski 1990; Slater and Narver 1994) postulate that market orientation produces superior innovation and greater success of new products. Lukas and Ferrell (2000) empirically investigated the debate over whether marketing orientation stifles or fosters product innovation. Marketing orientation was operationalized as consisting of customer orientation, competitor orientation, and cross-functional integration. From a study of a sample of U.S. manufacturing enterprises, these researchers noted that customer orientation increases the introduction of product innovation, and reduces the launching of imitation products. The competitor orientation, on the other hand, increases the introduction of imitation products and reduces product innovations or brand extension products. Other researchers have also suggested that a strong market orientation may lead to more imitation and incrementally improved products (Bennett and

Cooper 1979). Enterprises with high customer orientation find that consumers' needs tend to be limited to the products they are familiar with and can easily relate to. Consumers are usually not familiar with the full potential of new and emerging technologies in the products they use. They need to be educated about the potential benefits of product innovations. Organizations with a competitor orientation are preoccupied with competitors' capabilities and product portfolios. Such organizations are tempted to introduce imitation products or incrementally improved products (Zahra, Nash and Brickford 1995). To build high reputational capital, an organization must regularly invest adequate resources to develop its capability to produce a steady stream of innovative products.

Gatignon and Xuereb (1997) and Han et al. (1998) discovered that market orientation varies with an organization's capability to adapt to market and technology turbulence. Christensen and Bower (1996), Leonard-Barton and Doyle (1996) and others have pointed out that responding primarily to current customers, current competitors, and entrenched markets can inhibit innovating new technologies and diminish competitiveness in the long run. They propose that organizations should proactively build their institutional capabilities to anticipate and introduce disruptive technologies and product innovations.

Rogers (1995) examined diffusion of product innovations to different customers in home electronics markets. Customers' acceptance of some product innovations can facilitate adoption of related product innovations and facilitate brand extensions. This causes technology clusters due to certain core distinguishable elements of a technology that are perceived by customers to be closely related. LaRose and Hoag (1996) investigated adoption of complex innovations like the Internet and interdependence of clustered innovations. Von Hippel (1988) points out the users and customers of a product or service as significant innovators of product innovations.

From this discussion, the following research propositions can be hypothesized.

Research Proposition #2: Higher customer orientation in market orientation of an organization will increase the organization's product innovation, brand equity, and reputational capital.

Research Proposition #3: Persistent high competitor orientation in an organization's market orientation will (a) decrease its product innovation, (b) increase product imitation, and (c) decrease brand equity as well as the organization's reputational capital over time.

Research Proposition #4: Proactive anticipation and introduction of destructive-constructive technological and product innovations will initially reduce brand equity, but will eventually enhance brand equity and reputational capital of the organization.

QUALITY PROMISE INNOVATION

High brand value and reputation are usually associated with high quality of products and services. The 1990s witnessed a significant increase in cross-functional integration and teamwork between product innovation and quality management (Hutt 1995; Morgan and Piercy 1998). In the 1980s and 1990s, many enterprises competed and won increasingly demanding customers by building high quality promise in their goods and services (Gehani 1994). Organizations carefully build high-perceived quality reputation of their branded products. When consumers trust a well-established brand, their decision-making related to purchase is easier and faster. Purchasing a branded product or service reduces the post-purchase regret often associated with a bad purchase.

Xerox Corporation in the United States, and particularly its subsidiary Fuji-Xerox in Japan, adopted the principles of total quality management (TQM) as their core business philosophy. They discarded the "scientific management" proposed by Frederick Taylor in 1911, and empowered their workers with complete ownership of the quality of their output (Gehani 1998). The business processes of such enterprises were driven by the teachings of a number of quality gurus including Dr. W. Edwards Deming (1986), Joseph Juran (1986), Dr. Kaoru

Ishikawa, Genichi Taguchi, and others (see Gehani 1993).

In the 1970s, David Kearns, as President of Xerox, was facing intense competitive pressure (Kearns and Nadler 1992). For guidance and to revitalize Xerox, Kearns turned to the quality management practices of his Japanese subsidiary Fuji-Xerox. In 1982, as CEO of Xerox, Kearns implemented the "Leadership Through Quality" initiative to turn around the ailing Xerox. During the 1990s, he started a company-wide training program, cascading from the very top of the enterprise that started from him, to the very bottom of the enterprise. Almost every Xerox employee was taught quality tools to monitor the physical processes s/he interfaced with.

The Total Quality Management (TQM) philosophy emphasizes customer focus, commitment to delivering superior customer value, and cross-functional cooperation (Powell 1995; Anderson, Rungtusanatham, and Schroeder 1994). Central to the TQM philosophy is a cultural shift embracing a strong focus on customer orientation and satisfaction. Lukas and Ferrell (2000) cautioned from their empirical study that cross-functional coordination increases the launching of brand extension products and reduces the introduction of imitation me-too products. Therefore,

Research Proposition #5: Organizations pursuing Total Quality Management, with capability to integrate product innovations with customer focus and innovation, will have high brand equity and reputational capital.

ALIGNING PROCESS INNOVATION WITH PRODUCT INNOVATIONS

Some technology-driven enterprises compete by relying heavily on efficient transformation of raw materials and physical resources. Process innovation involves developing original ways to produce products in more efficient and agile ways than competitors by incorporating the latest technological developments.

Enterprises such as Toyota Motor Corporation are very efficient in converting minimum just-in-time inventories into highly reliable finished goods (Sobek, Liker and Ward 1998). Such enterprises promote their reputation and build brands by reducing waste and streamlining their process engineering. They focus on speeding their production throughputs. Quality function deployment and Taguchi methods are used to integrate product design with production process engineering. Thus, these organizations can supply their finished products and services to those customers who seek well-established low-cost branded products and services. This provides significant competitive advantage for products in their mature stage. We may recall that automobile is now an over 100-year-old mature product, with many of its radical innovations introduced more than 50 years ago (Abernathy and Utterback 1978; Gehani 1998). We, thus, propose the following.

Research Proposition #6: Organizations with capabilities to align and integrate the process innovations with their product innovations will have (a) more sustainable and (b) higher brand equity as well as (c) a higher reputational capital.

KNOWLEDGE INNOVATION AND INTELLECTUAL CAPITAL

Intellectual Capital (IC) of an enterprise is defined as its knowledge (such as in its innovative ideas) with a potential value. The real value of the Intellectual Capital is generated only when it is applied to a practical use and protected. When knowledge is protected by patents and ownership, it becomes Intellectual Property (IP) with a specified value. That value varies with the scope of its application. Intellectual assets of protected intellectual property, and trade secrets of an enterprise, are embedded in a firm's business processes.

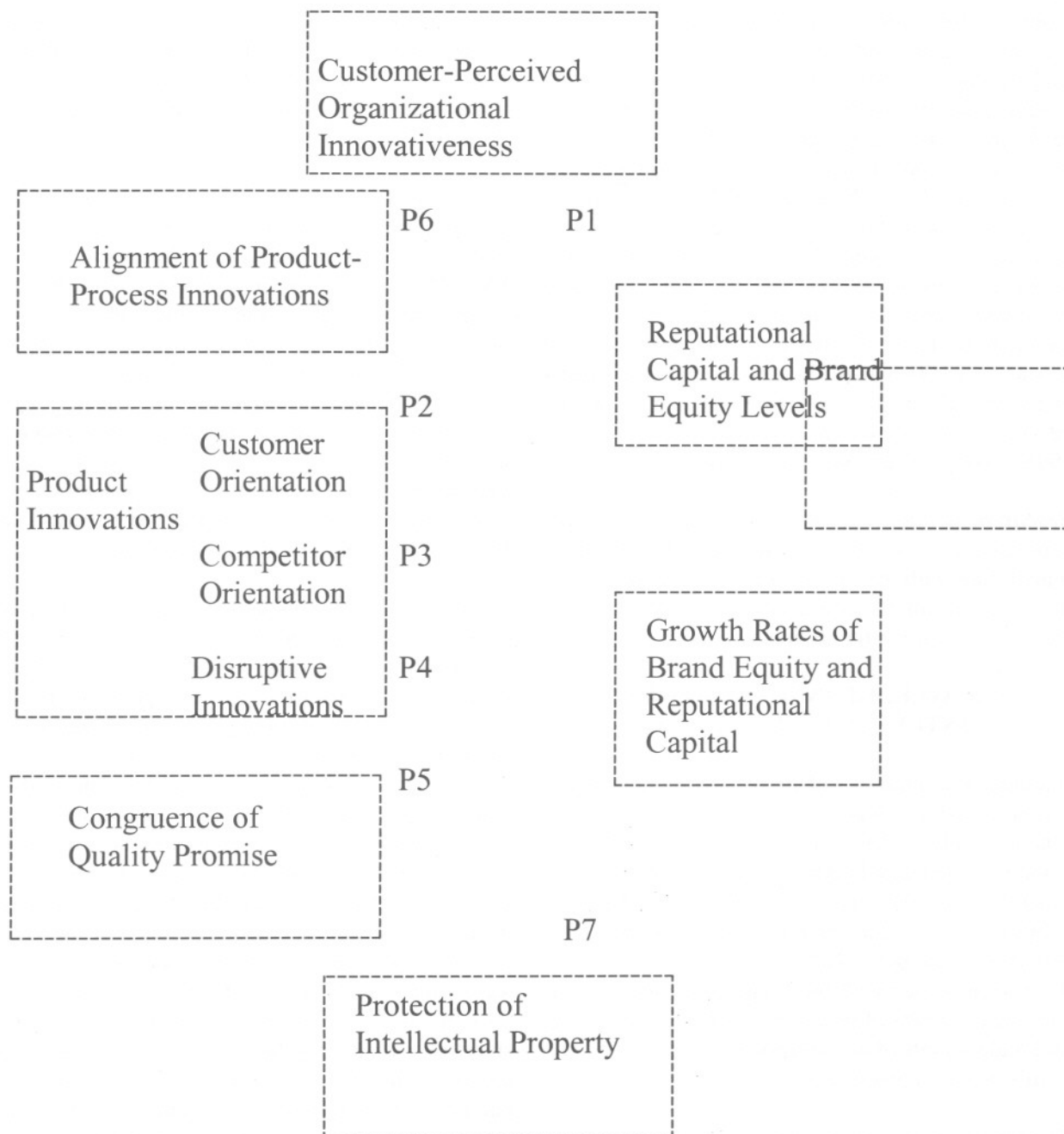
Timex saw significant erosion of its brand value and market share to rivals Casio and Swatch, who promoted their brands with fashionable use of digital technology. Timex regained and reinforced its lost brand value by introducing Indigo glow-in-the-dark technology (Roush 1995). Schwinn Bicycle once

dominated bike market with a 25 percent market share. Its Phantom bike brand for kids ruled in the 1950s, and the 10-speed Varsity bike brand was very popular in the 1970s. But in the 1990s, with low investments in R&D for lighter, sleeker bikes, the market share of Schwinn dropped to single digits as the new rivals introduced new technological advances in the compact high-performing bikes (O'Brien 1992).

Knowledge with a clearly defined value and specific applications, as in the case of a patent licensed for a specified purpose, is defined as Intellectual Asset (IA). It is a valuable intangible resource for its owner, and adds value to the institutional renown of the organization. In most enterprises, the most easily identifiable Intellectual Assets (IA) are patents, trademarks, copyrights, trade secrets and know-how. These Intellectual Assets help enhance brand values, and communicate to the potential consumers that the organization has products, processes, and business models with verifiable distinguishing features and characteristics.

These intellectual property rights provide a legally enforced monopoly for the innovating enterprise as an incentive for taking the needed risks. This regulated monopoly for a temporary period helps the innovative organization recover the expenses it incurred in the pursuit of its inventions and innovations. Public sharing of the knowledge underlying protected patent inventions and innovations facilitates a society-wide learning and economic progress. Highly reputed organizations such as Gillette create institutional processes and planning procedures so that 40 percent of the sales growth comes from new products such as the Sensor Razor introduced within the last 5 years. To develop these new products, Gillette must invest significant resources, beyond its R&D costs, and communicate the value-adding innovations in its patented product to target customers. Procter & Gamble is the owner of a large number of well-established and durable brands such as Tide laundry detergent, Head and Shoulders shampoo, Cascade automatic dishwashing detergent, and Old Spice after-shave lotion and deodorant. The company owns 2,500 active patents and invests \$1.2 billion

FIGURE 2
Enhancing Brand Equity and Reputational Capital by Integrating Organization-wide Innovations



annually on R&D employing 1,250 Ph.D. scientists, engineers, and researchers (Wilke and Zaichkowsky 1999). We can, therefore, finally postulate the following relationship.

Research Proposition #7: Organizations with high intellectual property protected by (a) patents, (b) trade-marks, (c) copyrights, and (d) trade-secrets, will have higher brand equity and reputational capital.

IMPLICATIONS FOR FUTURE RESEARCH AND MANAGERIAL ACTIONS

In this paper, we have focused primarily on endogenous innovation and brand enhancement, by building institutional capability. We noted that high brand equity and reputational capital of an organization could be enhanced by product innovations. To sustain high brand equity and institutional renown, these product innovations need to be complemented with a high quality promise, alignment with process innovations, and building of a firewall of protective intellectual property (See Figure 2 for the different components of this model).

This value-adding model for enhancing brand equity and institutional renown can be extended further. By incorporating, for example, the catalytic role of strategic leaders. Pioneering innovators are more likely to pursue risky radical product or process innovations, whereas more conservative accounting-oriented strategic leaders are less likely to invest the high level of resources required to pursue such risky innovative ventures.

The Internet and its derivative e-commerce technologies have radically influenced most enterprises. New innovations in information provide new opportunities to enhance brand value and reputational capital. Dell Corporation, founded by a Texas college student, Michael Dell, most successfully innovated its brand with telephony, and later enhanced it further with Internet technology. This helped this dynamic enterprise gain sustainable brand equity, reputation, and competitive advantage over its bigger and older competitors in the intensely competitive personal computer industry.

The knowledge and intellect of an enterprise are necessary but not sufficient resources for gaining competitive advantage in the New Economy. Brands in the knowledge-driven enterprises in the New Economy, are more likely to be heavily dependent on the innovative capabilities and the intellectual capital, skills, passions, and commitment of the people rather than the brick-and-mortar assets such as plants, equipments, and buildings. At Hewlett Packard, Bill Hewlett and Dave Packard created a work environment that allowed different individuals to be creative. Flexible engineering teams were innovated and compensated by profit sharing programs to build HP's brand and reputational capital. Human capital can significantly enhance brand equity and institutional renown.

Exogenous environmental turbulence and disruptive changes may also influence the institutional capabilities and innovation choices. Han et al. (1998) and Gatignon and Xuereb (1997) discovered that an organization's capability to successfully innovate depends on market and technological turbulence in the external environment. With high demand uncertainty of turbulent markets, a customer oriented product innovation is likely to perform more successfully than competitor oriented product innovations. In more certain and predictable markets, it was discovered that innovations with competitor orientations performed better than innovations with customer orientations.

Finally, the research propositions proposed here need to be empirically and statistically tested using a sample of carefully selected organizations. To keep the external environmental factors constant, we propose that the organizations must be selected from a specific industry defined by its four-digit Standard Industrial Code (SIC). A separate study will report the findings of such empirical investigations.

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