Top Managers and New Business Creation

Vijay Sathe

Foreword by Peter F. Drucker



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The age of entrepreneurship

After years of downsizing and restructuring, top managers are once again thinking about growth. But growth does not come as naturally or as automatically as it once did. Revitalization of industry and the creation of new jobs must increasingly depend on the development of new products and new markets to satisfy unrecognized and unmet public and personal needs. Such creation of economic value by perceiving and pursuing new business opportunities is what practitioners and scholars have in mind when they speak about the need for entrepreneurship.¹

Much has been written about independent entrepreneurship, which refers to an individual or a group of individuals striking out on their own to start a new business. Stories of entrepreneurs who have created new industries and new wealth, such as Steve Jobs at Apple Computer and Bill Gates at Microsoft, as well as pioneers of the new economy such as Jeff Bezos of Amazon.com and Meg Whitman of eBay, are now part of the American folklore. The academic community has made great strides in both teaching and writing about this subject.² Independent entrepreneurship has created substantial job growth in the United States, and is the envy of other nations trying to emulate it. It is also evident that independent entrepreneurship is not well suited to the pursuit of opportunities requiring large capital investments and long time horizons because venture capitalists are typically impatient and prefer small bets.³

Corporate entrepreneurship, which refers to the efforts of corporations to generate new business, has, until recently, received far less attention. Indeed, to those who view large firms as bureaucratic and inhospitable to creativity and innovation, the term "corporate entrepreneurship" is an oxymoron. The 1950s and 1960s image of the corporate executive in the conservative gray flannel suit was replaced in the 1980s and 1990s by their caricature as overly compensated short-term thinkers who are unwilling to innovate and take risks. And in the post-Enron era, the word "corporate" followed by the word "entrepreneurship" conjures up dark

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images of greedy corporate executives who find creative and innovative ways, whether legal or not, to line their pockets with millions of dollars at the expense of shareholders, employees, and the public at large.

There is enough evidence to justify these stereotypes. Corporate greed and fraud made possible by flawed incentive systems, lax auditing, and failure of corporate governance will have to be set right before the word "corporate" regains much respect. But scholars are in agreement with practitioners that large firms can be entrepreneurial in the positive sense of creating real economic value for everyone's benefit through the development of new products and new markets. And there is also agreement that corporations will need to become more entrepreneurial in the face of intensifying global competition and accelerating technological change.⁷

Corporate entrepreneurship is in the national interest not only because large firms account for much of the nation's economic output and jobs, but also because corporate and independent entrepreneurship complement and compete with one another. Having both enhances a nation's competitiveness. A case in point is the competition between bricks-and-mortar retailers such as Barnes & Noble and Internet pioneers such as Amazon.com. At first, the bricks-and-mortar players were written off as dead; now it looks as though the web ventures they have launched will give the upstarts a run for their money. The point is that corporate entrepreneurship by bricks-and-mortar players and independent entrepreneurship by Internet pioneers are competing head-to-head, as well as collaborating with each other in the form of strategic alliances and joint ventures. Consumers and the economy are the beneficiaries.

Strategy and entrepreneurship⁹

Strategy provides a good starting point for the examination of corporate entrepreneurship. With a clear strategic intent, the core competence of the corporation can be effectively leveraged to create new businesses. Well-known examples are Honda's forays into a range of new businesses based on its competence in high-performance engines, and Sharp's entry into a slew of new markets with products such as flat screens for televisions and computer monitors, personal digital assistants, and other viewing applications utilizing its core competence in liquid crystal displays. As these examples indicate, strategy drives entrepreneurship.

The story of Honda's entry into the US motorcycle market is a classic illustration of how entrepreneurship can also drive strategy. Faced with limited financing, major quality problems, weak dealer relationships, and negligible consumer brand awareness, it was the entrepreneurship displayed by Honda's US management team that led the company to a new strategy for success in the US market.¹¹

Unfortunately, these insights about strategy and entrepreneurship do not automatically lead to successful new business creation. This is because the proper organizational context must be created¹² and the right process installed, monitored, and *influenced* appropriately for new business creation to flourish.¹³ The work is the responsibility of top management, and is sometimes flawed in its basic conception or botched in execution. This book shows how and why this occurs and how top managers can do better.

Purpose of the book

Top managers of large firms are unable to promote successful entrepreneurship because the task is innately difficult. ¹⁴ Consider the findings of this study on what happened at Xerox. Corporate executives took a number of actions that seemed sensible enough. They appointed a proven entrepreneur, Greg Gibbons, ¹⁵ as division general manager (DGM) to spearhead the company's bold moves into the emerging office automation market. Recognizing that the corporate bureaucracy might stifle the entrepreneurial spirit, they gave Gibbons plenty of resources and a free hand to run the strategically vital Office Products Division (OPD) as he saw fit, with little or no corporate interference. And they granted Gibbons and his top management team big financial incentives, similar to those given to independent "Silicon Valley" entrepreneurs, to encourage the necessary risk-taking.

Gibbons, for his part, provided charismatic leadership that seemed appropriate too. He hand-picked his top management team, rallied the troops with a compelling vision of creating and dominating the Office of the Future, developed an innovative strategy for the "war" with IBM, and launched several exciting new products that could be interconnected into an office automation system targeted at Fortune 500 accounts with a new marketing and sales approach. After an encouraging start during Gibbons' first eighteen months, the division came in \$100 million below the profit plan for Gibbons' second full year as DGM, and \$150 million below plan for his third year – Gibbons left Xerox in the third quarter, with losses piling up.

What went wrong? First, the corporate executives, the DGM and his top management team took actions that seemed sensible but did not work – and in some cases actually backfired. Second, actions that needed to be taken were overlooked or under-emphasized. The underlying reason for both these errors, of commission and omission, is *not* that these were bad top managers; their critics might have suffered the same fate or worse.

Top managers fail in new business creation because it requires a *different* set of philosophies, attitudes, methods, and skills than those learned in

running an existing business. And it does not help that top managers, as well as MBAs and executive students for that matter, are inadequately educated and trained for this important task. This book offers both a theory of corporate entrepreneurship based on the real-world experience of top managers and practical advice on how to manage it better.

The major lessons

Top managers with successful new business creation track records do several things *differently* than the others – not because they are geniuses, but because they have played this game long enough to know what is necessary to achieve success. There are six major lessons to be learned from their experience; these themes are developed more fully throughout the book.

First, corporate entrepreneurship is inherently unpredictable and risky and traditional controls are ineffective for managing the technical, product, and market uncertainties of new business. In fact, such controls can be worse than ineffective because they can bring new business creation to a screeching halt. This is why some top managers view control as the enemy of corporate entrepreneurship. They are wrong. When it is conceived properly and used skillfully, control is an essential companion of entrepreneurship. The successful players expect high failure rates and volatile results with new business, and they make allowance for this in how they control it.

Second, corporate entrepreneurship has some similarities to independent entrepreneurship, but there are fundamental differences as well. For example, except under a very restrictive set of conditions to be described later, successful managers do *not* use the "Silicon Valley" model of independent entrepreneurship that offers big financial rewards for success, because of its toxic side-effects. They use alternative approaches for motivating entrepreneurial behavior that work much better within the corporate context.

Third, it is inherently difficult for top managers to successfully create new business because they are also responsible for the health and growth of existing business. ¹⁶ In independent entrepreneurship, by contrast, new business creation gets the founder's undivided attention. Corporate attempts to overcome this challenge by separating existing and new business create other problems. Such dilemmas must be properly managed.

Fourth, successful top managers promote new business creation with the "small-is-beautiful" corporate philosophy, which is focused on many small opportunities. Those who pursue the "bigger-is-better" philosophy, focused on a few large opportunities, tend to stifle new business creation

in the division. It is difficult to successfully pursue both corporate philosophies *simultaneously*, but, with appropriate skill and discipline, it can be done

Fifth, successful top managers know that new business creation must be pursued *consistently*, because it takes a long time to achieve results. Consistency also affords the opportunity to learn from failure and develop new organizational competencies that open new vistas of opportunity and improve the performance of the *existing* business!

Finally, new business creation must be seen as a *process* that needs to be managed.¹⁷ For some people, the word 'process' conjures up images of bureaucracy – checklists, procedures, and signoffs that slow things down and hamper creativity, flexibility, and innovation. As the quality revolution made clear, the management process to improve quality can degenerate into a bureaucratic exercise. But when thoughtfully applied as a management discipline, such a process can also lead to substantial improvements in cost and quality. A disciplined approach for new business creation makes it more fruitful, more predictable, and less risky.

Viewed constructively, the new business creation process consists of a number of stages: idea generation, concept development, market feasibility testing, business development, production scale-up, product standardization, and business termination. The actual number of stages and their focus will differ by company and industry, but three overarching entrepreneurial tasks must be properly managed if new business creation is to be successful: (1) the perception and definition of new business opportunities; (2) the motivation and commitment of people, and the availability of sufficient resources, to pursue these opportunities; and (3) the control of new business initiatives and the learning of the new capabilities required to exploit these opportunities successfully. 19

Definition of new business

Referring to Figure 1.1, everyone would agree that an entirely new product for an entirely new market constitutes new business. Honda's entry into the automobile market from its base of business in motorcycles is a case in point.²⁰

Most managers would also view *either* entry into an entirely new market or the introduction of an entirely new product as new business.²¹ Well-known examples are the recent entry of Western companies into the new China and India markets with existing products or product extensions, and 3M's innovation of Post-it notes for its existing consumer franchise in adhesive tape. The logic for calling such business new is that entry into entirely new markets requires much new learning about logistics,

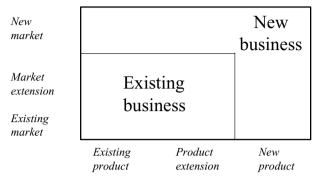


Figure 1.1. What is new business?

distribution channels, advertising, and so on; and the development of an entirely new product requires similar new learning about design, development, and manufacturing.²²

Three distinctions are worth noting. First, a new business might be entirely consistent with the current strategy, or it might result from autonomous strategic behavior that falls outside the current concept of strategy.²³ An example of the latter is Intel's move into microprocessors from its base of business in memories.²⁴ Second, a new business might be new to the world, as in the case of the Newton, a hand-held PDA (personal digital assistant) introduced by Apple Computer, or new to the company only, as in the case of PDAs introduced subsequently by Motorola and Sharp.²⁵ Third, a new business might (or might not) cannibalize existing business. For instance, Sharp's Zaurus, a new product born of the marriage of the electronic organizer and the PDA, cannibalized Sharp's sales of electronic organizers, whereas Sharp's entry into notebook computers did not eat into its existing business. In this book, business created by a new product and/or a new market is defined as new business whether or not it falls within the current concept of strategy, whether or not it cannibalizes existing sales, 26 and even if it is only new to the company, not new to the world, because all these cases require significant new learning for the company.²⁷

Definition of top managers

A large diversified company has managers at the corporate headquarters and in the divisions. The top managers are the corporate executives, the division general manager, and other members of the division's top management team (Figure 1.2).

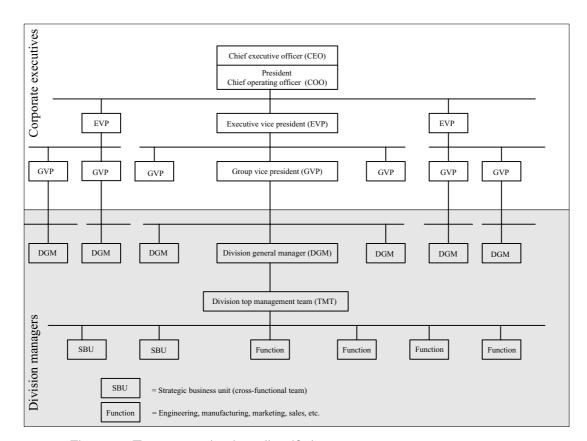


Figure 1.2. Top managers in a large diversified company.

The corporate executives are the chief executive officer (CEO), the president and/or chief operating officer (COO), the executive vice presidents (EVPs) responsible for major business sectors, and the group vice presidents (GVPs) responsible for a group of business divisions within a business sector.

The division general manager (DGM) is the leader of a business division and reports to a corporate executive, typically to a GVP or sometimes directly to an EVP. The DGM might have the title of Corporate Vice President or Division President.

Led by the DGM, the division's top management team (TMT) consists of heads of business units, functions, or both in the case of a matrix organization. TMT members might be called division vice presidents. The business units, commonly called strategic business units (SBUs), have profit and loss responsibility for product-market segments of the business. The functions, such as engineering, manufacturing, marketing, and sales, are typically either revenue centers or cost centers.

Scope of the book

There are two broad and relatively distinct arenas for corporate entrepreneurship. One is the spectrum of entrepreneurial activity carried out at corporate headquarters, including corporate mergers and acquisitions;²⁸ major strategic alliances,²⁹ corporate joint ventures,³⁰ and licensing agreements; utilization of corporate venture capital;³¹ corporate research and development; new venture development;³² and corporate spin-ins, spin-outs, and divestitures.³³ All these represent new business (or the disposal of existing business) for the corporation. They are typically driven by the CEO and other corporate executives, with the involvement of division managers as appropriate. These entrepreneurial activities are beyond the scope of this book.³⁴

We will examine the other major arena for corporate entrepreneurship—the existing and emerging business divisions, which are the bread and butter of the corporation.³⁵ In an emerging division, the bulk of business is new. Examples are IBM's PC division for the personal computer market in the 1980s, and Apple Computer's Personal Interactive Electronics division for the personal digital assistant market in the 1990s. In an existing business division, both reactive moves in response to competitive pressures and proactive moves stimulate new business creation.³⁶

Focus of the book

New business creation in a division of the corporation is a process driven by many forces, including the business environment, the management

culture, and the top managers responsible for the division. This book examines all these influences and their combined effect³⁷ in one major division of each of four large corporations: (1) Signal Communications Division of AMP (AMP Sigcom), (2) Micrographics Division of 3M (3M Micrographics), (3) Fabricated Products Division of Monsanto (Monsanto Fab Products), and (4) Office Products Division of Xerox (Xerox OPD).

The top managers – the corporate executives, the DGM, and the division TMT members – responsible for AMP Sigcom and 3M Micrographics were in general better at influencing new business creation than were their counterparts at Monsanto Fab Products and Xerox OPD. They encouraged their divisions to perceive and define more and better new business opportunities and they generated better motivation and commitment among their people to pursue these opportunities. They also controlled the initiatives better and promoted the learning necessary to exploit these opportunities successfully.

The corporate executives and division managers responsible for AMP Sigcom and 3M Micrographics were on the whole more effective because they had consistently emphasized new business creation over a long time. They did many things well but were by no means perfect; they made mistakes that they and others could learn from. And although their counterparts at Monsanto Fab Products and Xerox OPD had a less successful record of new business creation, they also did many things well that others could learn from. The book brings out this real world of top managers – complex, subtle, and fascinating.

The influence of top managers

The book presents a theory of how various factors drive corporate entrepreneurship and make it more successful or less successful. Specifically, the theory explains how top managers influence new business creation in a corporate division, for better or for worse. It is a "grounded theory" because it was derived from the ground up using systematic induction – by constantly comparing and contrasting the more and less successful cases of new business creation in this study.³⁸ The data for this analysis were obtained from documents, personal observations, and repeated and extended interviews with over one hundred top managers in the four companies studied over a three-year period. Additional details concerning the methodology are at the end of the appendix to this chapter.

Top managers *directly* influence new business creation in a corporate division by their actions and behavior. They also do so *indirectly* if they change the business environment by re-chartering the division to compete

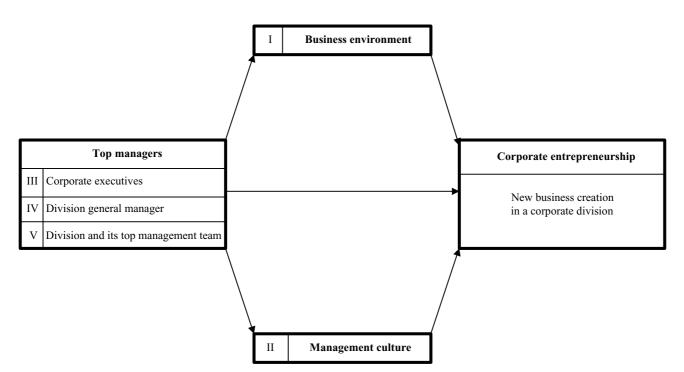


Figure 1.3. The direct and indirect influence of top managers.

in a different business arena, or if they change the management culture (Figure 1.3). Such indirect influence by any one generation of top managers is limited, because a division is seldom re-chartered, and changes in the management culture can take years to accomplish. But these two major factors – the business environment and the management culture – exert an important influence on new business creation, and they are examined in Parts I and II of the book respectively. The direct influences of top managers – the corporate executives, the division general manager (DGM) and the division's TMT – are examined in Parts III, IV, and V respectively.

The combined effect of all five major influences on new business creation is explored in Part VI. This last part of the book also highlights ten critical new business creation issues that cut across the five major influences, and provides guidance for top managers on how to manage them for better results.

A summary overview of this theory of corporate entrepreneurship — which is developed along with the supporting data and rationale throughout the book — is in the Appendix at the end of this chapter. The specific hypotheses of this theory are listed in Tables 3.1–18.1 which appear at the beginning of chapters 3–18. These tables summarize how various factors influence new business creation and convey the main points of each chapter at a glance.

Limitations

The book is based on interviews that I conducted, documents that I collected, and observations that I made over a three-year period in the early 1980s. All the managers' quotations in this book are taken from the interviews that I conducted during that time period.

The painful restructuring of the late 1980s, the corporate revitalization of the early 1990s, and the dawn of the Internet and the new economy in the mid-1990s have made corporations more efficient and agile. But the human drama at the top management levels described in this book has not changed much.³⁹ Top management clients and executives in the classroom continue to find the framework and the theory of the book to be both valid and useful. This claim needs to be tested with additional research.

Over one hundred corporate executives and division managers in a variety of positions were interviewed to provide as rich and as balanced a study as possible. However, I was not able to interview CEO John MacNeil at 3M and two top Xerox corporate executives, CEO Bill Nash and president Larry Wind. Their perspectives as represented by others – and

by themselves in print and in other media – are included whenever possible.

Terminology: initiatives, champions, and sponsors

A new product initiative, a new market initiative, or a new product-market initiative, will be called a "new business initiative." A joint venture between a corporate division and another company, or a new business initiative that has a dedicated venture organization within the division, will be called a "new venture." All of these new business creation activities will be referred to as "new initiatives" or "new programs" or "new projects," or more simply as "initiatives" or "programs" or "projects."

The people who are most passionately and directly involved in driving an initiative are the "champions." In a corporate division, these are typically operational level people (commonly in the technical or marketing areas), but they also can be higher-level managers, including the DGM or other members of the division TMT. The principal champion is the one whose involvement is viewed as the most crucial in the transformation from concept to commercial business. 42

The "sponsors" are those who believe sufficiently in the initiative to lend their support to it in the form of money, talent, and other tangible resources, as well as intangible resources such as their names and reputations to give it credibility. For initiatives within a corporate division, the sponsors are typically the DGM and one or more of his⁴³ TMT members, and can also include corporate executives. The sponsors support the champions just as venture capitalists support independent entrepreneurs.

Introduction to the participants

A brief introduction to the companies, the businesses, the initiatives, and some of the top managers is now presented. The reader will get a much better feel for all of these in the chapters that follow, as the people involved describe their perceptions, beliefs, agendas, and actions *in their own words*.

The companies

AMP, 3M, Monsanto, and Xerox were manufacturing companies whose primary customers were other companies.⁴⁴ AMP had revenue of \$1.5 billion, and the other companies each had revenues of \$6–8 billion.⁴⁵

AMP manufactured electrical and electronic connectors. The company emphasized staying close to the customer, and designed its connectors into the customer's products. 3M produced specialty chemicals, pressure-sensitive materials, healthcare products, electronic products (including

some connectors that competed with AMP's products), and imaging products, including copiers and micrographics products and supplies. Monsanto manufactured agricultural chemicals, industrial chemicals, specialty chemicals, resins, rubber, plastics, and fabricated products. Xerox produced copiers and duplicators based on plain paper technology, and it competed with 3M copiers for certain applications.

The business divisions

AMP's Signal Communications Division (AMP Sigcom) served numerous markets, such as aerospace, military, medical testing instruments, consumer electronics, computers, and telecommunications, with applications for high complexity, RF (radio frequency) analog, digital and optical signals which were transmitted through a variety of cables – coaxial, shielded, ribbon, and optical. The division was a design and assembly house, with all cable purchased from the outside.

3M's Micrographics Products Division (3M Micrographics) made microfilm machines, systems, and supplies for recording, archiving, and retrieving text and graphical information for the professional market. The division produced both products (machines and systems) and supplies (proprietary dry silver paper, film, and other coated supplies).

Monsanto's Fabricated Products Division (Monsanto Fab Products) made blownware products, such as plastic bottles for mineral water, colas, and other "cold-fill" applications; plastic film for commercial and agricultural storage and for consumer use in applications such as diapers; Fomecor products for commercial packaging and insulation; rolled goods and doormats for industrial and commercial applications; and Astroturf—an artificial surface for use in applications such as football stadiums.

Xerox's Office Products Division (Xerox OPD) pursued new business opportunities created by the emerging electronic information technologies. The division made word processors, facsimile machines, and electric typewriters, and introduced several new products and systems for the nascent office automation market.

Three of the four divisions in this study generated \$200–300 million in revenue; the fourth, AMP Sigcom, had \$20 million in revenue. Three of the four divisions were located at corporate headquarters; the fourth, Xerox OPD, was located a thousand miles away. AMP Sigcom did not have its own marketing and sales function, although it had product managers responsible for product marketing. It relied instead on a centralized marketing and sales organization that served all AMP divisions. 3M Micrographics had for many years relied on the centralized sales organization of the Business Products Group of which it was a part, but the sales function was decentralized back to the division just before this study

began. Monsanto Fab Products and Xerox OPD had their own marketing and sales functions, but OPD had relied on the Xerox copier sales force prior to this study.

The division general managers (DGMs)

The manager heading up each division when the study began will be referred to as the "first-generation" division general manager, or "DGM 1." Their names were Mike Walker, Buddy March, Dan Stewart, and Greg Gibbons. All of them moved on one to two years into the study. Gibbons left the company; the other three were promoted. Each of their successors will be referred to as the "second-generation" division general manager, or "DGM 2" – Clay Smith, Ray Thorngate, Ian McVay, and Steve Carter.

AMP's DGM 1: Mike Walker Mike Walker helped AMP Sigcom to define markets more broadly. He emphasized new business creation to tap new markets with both product extensions and new products. He accomplished this not only by upgrading the human resources in his division through careful personnel selection and development, but also by getting the whole organization to think and act differently. Walker was personally focused on new business creation; he delegated the management of the existing business to the product managers. He traveled extensively to visit customers and was personally involved in championing some initiatives and in sponsoring most others.

AMP's DGM 2: Clayton (Clay) Smith When Mike Walker was promoted to group director (equivalent to group vice president, GVP, in other companies), his head of new products, called the development manager, succeeded him and continued to report to him. As DGM, Clay Smith supported the many new initiatives launched during Walker's tenure as DGM, and started several new ones while Walker was still the group director. When, toward the end of this study, Walker was promoted again, to a crucial overseas assignment – it was widely believed that he was being groomed to become CEO – Walker's successor as group director, Jon Grover, signaled a new emphasis for the Sigcom division. Grover emphasized product quality and customer service to enhance the profitability of existing products, and DGM Clay Smith shifted his emphasis accordingly.

3M's DGM 1: Buddy March Beginning as a machinist, design engineer, and inventor, Buddy March was the head of a business for ten years before it was acquired by 3M and merged with an internal

program to create the 3M Micrographics division, with March as DGM. March was a founder of the Micrographics Industry Association and was widely viewed as the industry godfather. Within 3M, March was seen as a flamboyant risk-taker, having stuck his neck out for many new initiatives, including two that his boss had opposed. These two initiatives and one other eventually became big winners in the marketplace. March remained DGM for eighteen years before he was promoted to GVP. The division grew tenfold during this period and spawned the highly successful Imaging Products division. The original 35mm lines, targeted primarily at the engineering design market, were split off as a semi-autonomous unit, the Engineering Products department. It also grew to become a division.

3M's DGM 2: Ray Thorngate The Engineering Products division, and the rest of the original Micrographics division, continued to report to Buddy March after he was promoted to GVP. Only the Engineering Products division was tracked in this study. Ray Thorngate, the long-time technical director of 3M Micrographics, agreed to become DGM of Engineering Products at the insistence of March and his boss, Ed Baker. Thorngate would have preferred to move up but remain within the technical function during his last two years prior to retirement.

The business of Engineering Products grew faster and was more profitable after it became a separate unit. Nevertheless, Thorngate felt frustrated by the many challenges he faced as DGM. The industry was moving toward system integration, requiring investments in new competencies, at the same time as the corporation was demanding a greater profit contribution from the division.

Monsanto's DGM 1: Dan Stewart Rising through sales and marketing, Dan Stewart was seen as a "people person" and a talented strategic thinker. When he took over as DGM of Monsanto Fab Products, he found an organization that was demoralized in the wake of his predecessor's "hatchet era." Some product lines had been sold, and headcount had been reduced. Stewart sought to mobilize the division by empowering the people to grow the existing businesses and generate new businesses via entrepreneurship.

Over the next three and a half years, the division's morale and the performance of some of its businesses improved, and two of the new initiatives sponsored by Stewart (Spray Guard and OPET bottle) began to show promise. By then, Stewart had acquired the reputation of a "corporate entrepreneur" and was given responsibility for two corporate ventures (Prism Separator and Radiation Dynamics, Inc.) and one other unit

(Enviro-Chem) during the last eighteen months of his five-year tenure as DGM. Only Fab Products, for which Stewart was still responsible as its DGM, was tracked in this study.

The three new units under Stewart were eventually combined with Fab Products to create the Engineered Products division. Stewart was named DGM of this new division and reported directly to an executive vice president (EVP) rather than to a managing director (equivalent to a GVP). It seems confusing, but Stewart remained DGM of Fab Products, which was still called a division although it was now a part of the Engineered Products division. This reorganization occurred just four months before Stewart was promoted to managing director of Monsanto Agricultural Products, the company's "crown jewel."

Monsanto's DGM 2: Ian McVay Ian McVay was previously DGM of Detergents & Phosphates (D&P, part of Monsanto Industrial Chemicals). The confusing organizational designations were continued when McVay replaced Stewart as the DGM of both Fab Products and Engineered Products.

McVay had a successful track record both in new business creation and in asset management, and he advocated what he called a "balanced strategy" that emphasized both. He decided to reorganize Fab Products by separating what he viewed as the growth opportunities, including the initiatives he inherited from Stewart, from what he perceived as more mature businesses that he felt needed tighter asset management in terms of cost control and efficiency improvement.

As this study ended, Fab Products got a new head – a business director rather than a DGM – who reported to McVay, who continued as DGM of Engineered Products.

Xerox's DGM 1: Greg Gibbons Starting as a research engineer, Greg Gibbons became the charismatic leader of Shugart, a successful start-up company that was later acquired by Xerox. Given his reputation as a proven entrepreneur, corporate executives appointed Gibbons as the DGM of Xerox OPD because they believed that this strategically vital emerging new business required a strong entrepreneurial thrust. Gibbons' star rose quickly within Xerox as OPD cut the projected annual loss during his first six months (July through December) as DGM. He turned in a small profit for the last quarter of his first full calendar year (January through December) as DGM – the first profitable quarter for OPD after six consecutive years of losses totaling \$200 million.

However, Gibbons' star began to fall in his second full year as DGM when OPD began to miss its monthly sales and profit targets by wide

margins. And his credibility plummeted when the division's new initiatives piled up huge losses that sank OPD \$100 million below the profit plan for his second full year as DGM. Gibbons left Xerox to start a new company in October of his third full year as DGM, as the division continued to perform poorly, finishing \$150 million below the profit plan for that year. Gibbons was succeeded by one of his subordinates, Steve Carter.

Xerox's DGM 2: Steve Carter OPD was restructured after Gibbons left. The two big money-losing initiatives – Ethernet and Star, the professional workstation – were transferred out of OPD. As DGM, Steve Carter was responsible only for word processors, fax machines, and the one successful initiative of the Gibbons era that he had headed up, the Xerox Memorywriter "intelligent" typewriter (code-named Saber) which competed directly with the entrenched market leader, the IBM Selectric typewriter. The pendulum had swung from tight corporate control of OPD prior to Gibbons, to less stringent control during Gibbons' tenure, to tight control once again under Steve Carter.

The initiatives

The new business initiatives at AMP Sigcom focused on different market applications of existing and new products. Three initiatives were successful (Ribbon Coaxial Cable, or Ribbon Coax for short, and its connector—which together were called Cable Assembly; Commercial RF Connector; and Coaxial Cable Tapping Device, or Coaxial Tap for short, to connect or "tap" a shielded cable to a signal source). Two initiatives were not yet successful but were being pursued when the study ended (SMA F-Connector for military applications, and the Fiber Optics venture). Three initiatives were failures (Transmission Cable, Semi-Rigid Cable Assembly, and Tulip Plug — the first two were advanced cable designs and the third was a low-cost connector for consumer sales through outlets such as Radio Shack).

The initiatives at 3M Micrographics were part of a strategy of providing the market with a full line of products, systems, supplies, and services for recording, archiving and retrieving text and graphic information using microfilm. Most of these initiatives were new products, rather than new markets, given the strategy of leveraging 3M Micrographics' formidable distribution system. The success of three new initiatives (Dry Silver Paper for printing copies from microfilm, Imaging Products for special applications such as printing satellite images, and Tanaka Printer for high-quality printing from microfilm) greatly exceeded expectations. One other new

initiative was a success (the 16mm family of File Management products for office applications), one was not successful but was being pursued (the 105mm family of microfiche products), and one was a financial disaster (Com, for Computer output microfilm – including an acquisition, Beta Com – a hybrid product based on a marriage of traditional microfilm and newer computer technology⁴⁶). Several external programs, including joint ventures and licensing agreements, were also pursued at 3M Micrographics. None involved major commitments, but all either failed or did not achieve the desired results – with the notable exception of the Tanaka Printer, which was licensed and co-developed with a Japanese company.

The initiatives at Monsanto Fab Products sought to leverage the company's proprietary Cycle Safe and high-speed continuous injection molding (CIM) technologies into new markets. None of these initiatives was successful. One (RCA Disk Caddy, a plastic storage "jewel case" for the RCA videodisk) was de-committed, and the jury was still out on three others when the study ended (OPET plastic bottle for hot-fill applications such as juices and beer – a successor to the established PET plastic bottle for cold-fill applications such as soft drinks, Spray Guard mud flaps for truck tires, and Drainage Mat for systems designed to drain water off roads and highways).

The initiatives at Xerox OPD were part of a strategy of providing the market with a line of products that could be upgraded and interconnected into an office automation system targeted primarily at professionals. Of the four initiatives, one (Memorywriter typewriter) was successful, and the jury was still out on two others when the study ended (Ethernet, the pioneering local area network product, and the Xerox 820 personal computer). A fourth initiative was a financial disaster (the Star professional computer workstation – the successor to Xerox's pioneering computer named ALTO, for Xerox's Palo Alto Research Center – featuring the first commercial implementation of a graphical user interface and mouse).

The questions to be answered

Given the experiences of these companies and managers, the reader must now wonder whether the observed differences in new business creation were caused by differences in the business environments of these divisions, by differences in the cultures of these companies, or by other factors. How did the top managers influence new business creation in a division? What could they have done differently to achieve greater success?

We begin to answer these questions in Chapter 2 by exploring the importance of a consistent emphasis and approach for new business creation. Figure 1.4 provides a summary of the names and positions of the

Company	AMP	3M	Monsanto	Xerox			
First generation (during tenure of DGM 1)							
CEO President EVP	Jim McGuire	John MacNeil Ed Baker	Jim Reilly	Bill Nash Larry Wind			
GVP VP Planning	Ted Rigby		Hal Courtney Alf Hummel	Jerry Tyson			
Division	Sigcom	Micrographics	Fab Products	OPD			
DGM 1 TMT 1:	Mike Walker	Buddy March	Dan Stewart	Greg Gibbons			
Technology Marketing Finance	Clay Smith	Ray Thorngate John Hypes Wim Williams	Peter Dell	Rick Smale			
Product manager Production	Jim Fitch	will williams		Rick Siliale			
engineering Commercial	Arjay Mason						
development SBU manager		Ralph West	Joe Hurley	Stu Little			
Second generation	(during tenure of DG)	M 2)					
EVP GVP	Mike Walker (later: Jon Grover)	Alex Hubble Buddy March	Ed Costello	Jerry Tyson			
Division	Sigcom	Engineering Products	Engineered Products	OPD			
DGM 2 TMT 2:	Clay Smith	Ray Thorngate	Ian McVay	Steve Carter			
Technology Product manager	Jim Fitch Arjay Mason	Tom Sonnenfeld	Peter Dell				
Commercial development	i ajaj iriason		Joe Hurley				

Figure 1.4. Names and positions of the key players.

key players in this book. It is a convenient reference for keeping track of the cast of characters as the drama unfolds in Chapter 2 and beyond.

APPENDIX: A THEORY OF CORPORATE ENTREPRENEURSHIP

While our recognition of the importance of corporate entrepreneurship and our understanding of how to foster it continues to grow, there is precious little systematic evidence on how new business creation is influenced by *top managers*. ⁴⁷ This stems in part from the difficulty of gaining

research access to study these managers. This book adds to the limited literature on the subject by providing an in-depth look at how these managers influence new business creation in a corporate division.⁴⁸

A conceptual framework showing the direct and indirect influence of top managers on new business creation was introduced earlier (Figure 1.3). The major factors of the theory of corporate entrepreneurship developed in this book and their influence on new business creation are indicated in the summary sections (for Parts I–VI) that follow. The specific hypotheses of the theory of corporate entrepreneurship are listed in Tables 3.1–18.1.

Part I: The business environment

The business environment has two parts, external and internal. First, consider the influence of the external business environment, which includes customers, competitors, and other industry and competitive forces, as well as the legal, regulatory, technological, and economic environment.

Customer pressures spur new business creation. But pressures from existing customers also make it difficult to pursue disruptive technologies that lead to new markets. And pressures encountered in co-developing a product with the customer, in competing with the customer, and in dealing with intimidation by the customer dampen new business creation. The threat of substitute products and services, and industry rivalry, spur new business creation.

Concerns about product liability dampen new business creation whereas strong patents encourage it. Government regulations facilitate new business creation by encouraging innovation or hinder it with bureaucratic procedures and delays. Sometimes they do both!

The absence of industry standards makes it difficult to introduce new products if customers hesitate to make purchases in anticipation of such standards. Successful industry players create industry standards or adapt quickly to emerging standards. Those who anticipate technology trends find new business opportunities in markets that others view as "mature." Those who ignore these trends end up as somebody else's lunch.

Adverse economic conditions inhibit new business creation by biasing the thinking and actions of top managers toward survival and near-term results. External advisors such as management consultants either facilitate or hinder new business creation depending on their assessments and agendas.

Next, consider the influence of the internal business environment, which refers to the condition of the division's existing business (whether it is growing, maturing, or declining), the relative amount and stage of