Jean-Philippe Deschamps & Beebe Nelson

innovation governance

How Top Management Organizes and Mobilizes for Innovation

Foreword by Bill George

Professor, Harvard Business School and former Chair & CEO of Medtronic

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FOREWORD

INNOVATION

Many volumes of books and articles have been written on this subject, yet most organizations acknowledge they are not truly innovative in spite of concentrated efforts to become so. Back in 1997 HBS Professor Clayton Christensen wrote his seminal book, *The Innovator's Dilemma*, that described in lucid terms why organizations fail to innovate. Businesses, including my own, Medtronic, took his admonitions to heart, yet most established companies have been unable to move the needle on their efforts to become more innovative. I continue to be amazed at the number of outstanding companies whose leaders talk the innovation talk but fail to create innovative organizations or to come up with innovative business ideas.

In my experience, most companies fail to innovate for five fundamental reasons:

1. Lack of direct engagement of the CEO and clarity around leadership of innovation
2. Absence of a sound, well-established innovation process

3. Failure to distinguish clearly between science, product engineering, and innovation
4. Risk aversion and low tolerance for failure
5. Unwillingness to support innovation budgets during near-term performance shortfalls

World-class innovation expert Jean-Philippe Deschamps and his co-author, Beebe Nelson, have examined the larger scope of innovation and have discovered why companies fail to innovate. In their view two things are sorely lacking in organizations: leadership and governance. In his 2008 book, *Innovation Leaders*, Deschamps addressed the vital question of why innovation leaders are sorely lacking in most established organizations. He also addressed the question of what can be done to develop more innovation leaders who rise to the top of large organizations.

In *Innovation Governance*, Deschamps and Nelson scale new heights in taking the question of innovation leadership to a higher plane by focusing on the core reason for failure: lack of a well-established system for governing innovation. They challenge the reader to ask, why don't all companies who are striving to be innovative have a well-established system of governing their efforts and clear ground rules for carrying them out?

While scholars and practitioners like myself have argued for decades about whether the key is the innovation process or its leaders, Deschamps and Nelson neatly combine the two in their concept of innovation governance. However, their solution is not prescriptive. Rather than advocating a single governance model, they instead explore the full range of innovation governance approaches. Their 3×3 matrix model produces nine ways of thinking about the type of governance system you wish to establish for your company.

To provide depth and context to each of the nine models, Deschamps and Nelson examine the innovation structures of the world's leading companies and how they govern their innovation. By avoiding the one-size-fits-all approach so common in most treatises on innovation, they challenge innovation leaders to create their own approaches that will work best in their cultures and align with their business models and strategies.

MY EXPERIENCES IN LEADING INNOVATION

Throughout my career I have seen innovation as the key to creating value for your customers, motivating your employees, and building growing businesses – all the necessary elements for creating lasting value for your owners and investors. In my early years in business my role models of innovation leaders were Hewlett-Packard founders David Packard and Bill Hewlett, Merck's Roy Vagelos, Louis Lehr of 3M and Medtronic founder Earl Bakken. In recent years, newer innovation role models have emerged, such as Dan Vasella of Novartis, Arthur Levinson of Genentech, eBay's Meg Whitman (now CEO of Hewlett-Packard), Apple's Steve Jobs and Google's Eric Schmidt.

I have never considered myself an innovator who invents products. Rather, I have tried to be a leader who leads and stimulates the innovation process to ensure the real innovators get the encouragement, support, mentoring, and focus they need to produce great innovations. Surprisingly, many CEOs and senior leaders of established companies who are eager for their companies to innovate nevertheless take actions repeatedly that prevent an innovative culture from emerging. For example, during budget season they are prone to trim back budgets for innovation projects rather than protect them, or they stand passively by as their business heads do so in order to meet pre-established targets or protect short-term product upgrades. Or they may be quite critical of innovations that do not materialize, often punishing the innovators who took the risks on their behalf. Other leaders fully fund their research and development budgets, but never engage the innovators themselves. Nor do they understand their own cultures well enough to know why they are not producing any genuine breakthrough products.

My first general management role dates back to 1969. My goal was to create the consumer microwave oven business for Litton Industries, a challenge I found highly stimulating. At the time consumers didn't even know what microwaves were. If they did, most were afraid of potential radiation, as we weren't that far removed from stories of Hiroshima and Nagasaki. At Litton we used innovation in our products and marketing to turn the microwave

oven from a popcorn popper to a widely used device that has become standard in most homes. Since neither consumers nor appliance sales people, most of whom were men, understood how to use the product, we hired 2,000 part-time home economists to work at retail, conducting cooking classes and demonstrations.

Sadly, when I moved to Honeywell in 1978, my successor at Litton focused almost entirely on getting product costs down and innovation dried up. In my Honeywell years, innovation became more difficult. This company of superb engineers focused primarily on generating better products and processes, not breakthrough innovations. The ring laser gyroscope that guides all aircraft today was a notable exception.

Joining Medtronic in 1989, I saw the opportunity to harness and expand innovation in a highly creative company that was using medical technology to restore millions of people to full life and health. Medtronic was filled with remarkable innovators and exceptional innovation leaders, yet the company's recent history had been characterized more by missed opportunities and notable failures in innovation. Win Wallin, my predecessor as CEO of Medtronic, revived the process by focusing on the implantable defibrillator, whose inventor had been rejected by Medtronic. However, a system for governing innovation had not yet been established within this predominantly functional organization.

To create the innovation governance system at Medtronic, we started with our board of directors. Between 1990 and 1996 Wallin and I took significant steps to add pioneering medical doctors and technologists to the Medtronic board, who ensured that the company's emphasis stayed laser-focused on innovation. The board established a technology and quality committee, which provided oversight, ideas and guidance to management. The T&Q Committee, as it was known, was very helpful in pointing out emerging technologies that management may have overlooked and examining the viability of technologies we were pursuing. The board wanted to ensure that the company never again overlooked an important medical technology as it had with the implantable defibrillator.

From a management standpoint, it was clear that Medtronic's innovation was not well organized, leading to haphazard results. To

bring some clarity to the governance process, I decided to bifurcate the organization between established businesses organized around strategic business units (SBUs) and an innovation function that included new ventures, research projects, and external alliances. The existing businesses were run by chief operating officer Art Collins, who later became my successor. The innovative work was championed by vice chairman Glen Nelson, MD. Nelson was a brilliant physician with a keen interest in medical technology who was recruited from a pioneering health maintenance organization. The company's largest business, cardiac rhythm management (pacemakers and defibrillators), was led by an exceptionally strong innovation leader, Bob Griffin. Griffin had a long history within the company of championing breakthrough innovations, often reprogramming funds to keep them alive. For the next decade Nelson and Griffin drove Medtronic's innovation while Collins skillfully managed the SBUs. Both Nelson and Griffin were masters at scouring the world for new medical technologies being created by courageous physicians and entrepreneurs that we could bring into Medtronic.

During this period Medtronic innovators were successful in using medical technology to create breakthrough innovations that addressed a wide range of complex diseases like sudden cardiac arrest, Parkinson's, atherosclerosis, heart failure, spinal disease, diabetes, and incontinence. All they needed from our top executive team was funding, focus, and a high level of engagement with their innovations. Not infrequently, Nelson, Griffin and I had to make organizational interventions to prevent the SBU leaders from shooting down their ideas before they had been developed or refusing to transfer the talent to them that were needed to make their innovation projects successful.

I recall one especially tense meeting involving a novel idea for minimally invasive cardiac surgery, also known as "beating heart" surgery. Since Medtronic sold one-third of all the heart bypass systems in the world, this invention was very threatening to our core business, whose leaders adamantly opposed going ahead with the venture. To bolster their case, they brought in several of the world's leading cardiac surgeons who opposed any designs that did not give them full visual access to the heart on bypass. In the end

we proceeded with the new procedure, which today accounts for more than 20% of the world's bypass procedures and results in better outcomes at lower cost for patients. My assumption was that if we did not go ahead, a more innovative company would perfect the procedure and overtake Medtronic in the market.

In terms of metrics, Wallin established corporate goal in 1986 of growing revenues and profits by 15% per annum. To achieve this growth in markets expanding at only 6-8%, we recognized we had to create entirely new markets through innovation. Thus, we established a second primary goal that 67% of our revenues would come from products introduced in the past 24 months. This goal was especially challenging when compared with 3M or Hewlett-Packard, which had announced goals of 25% of revenues coming from products introduced in the past five years. The 67% was achieved every year from 1990 through 2006, when the innovation process slowed down. Realizing such an aggressive goal meant that Medtronic had to employ rigorous processes for product innovations complemented by separate processes for more speculative research into new medical therapies.

In analyzing the actual results during those years, it becomes clear that product innovations were responsible for the bulk of Medtronic's increase in market capitalization between 1985 and 2001 from $400 million to $60 billion. In the past decade the Medtronic's innovation culture has atrophied as Nelson and Griffin retired, and attention shifted away from new medical technologies to improving existing products with lower risk profiles.

Currently, Medtronic's system of innovation governance is being revived by new CEO Omar Ishrak, who has a clear mandate from the Medtronic board of directors. Ishrak, who was born in Bangladesh, is a pioneer in the process of reverse innovation – bringing innovations from emerging markets to developed markets. He gained notoriety for the invention of low cost ultra sound systems in Asia that enabled General Electric to capture the leading position in the United States and Europe. As CEO of Medtronic, he is focusing not only on product innovation, but also on business model innovation as a vehicle to expand Medtronic's opportunities in emerging markets. Ishrak has established a rigorous innovation

governance system led by Medtronic's head of business development with regular reports to the board's T&Q Committee.

A RIGOROUS SYSTEM OF INNOVATION GOVERNANCE CHAMPIONED BY INNOVATION LEADERS

In their examination of the nine types of innovation governance models, Deschamps and Nelson offer convincing evidence that a variety of innovation governance models can be effective. Their insightful case studies, drawn from their work with some of the world's most innovative companies – IBM, Corning, Nestlé, DSM, Tetra-Pak, and Michelin – are not only revealing but inspiring. Their arguments on behalf of establishing an effective system of innovation governance are compelling and irrefutable.

This brings us back to the original question, why don't all companies who have a desire to be innovative adopt clear processes for governing their innovation? The answer, in my view, is leadership. To be successful, companies must be led by leaders – the CEO, top executives and board of directors – who are deeply and irrevocably committed to innovation as their path to success. Just making innovation one of many priorities or passive support for innovation are the best ways to ensure that their company will never become a great innovator.

As Deschamps and Nelson make abundantly clear, building and sustaining an innovative organization requires clearly established processes for governing innovation run by innovation leaders that are willing to devote substantial portions of their time and their political capital to the innovation process. They must be backed by a board of directors who is equally committed to innovation. These were the ingredients that made us successful at Medtronic. The same ingredients have led to the astounding long-term success of such innovation giants as 3M, IBM, Apple and Google.

In my experience sustaining innovation requires *both* innovation leaders and a rigorous system of innovation governance. One without the other is insufficient. Innovation governance without

leadership from the top will ultimately wither as the immediate takes precedence over the important. Innovation leaders without a well-established governance process are too dependent on individuals and vulnerable to losing focus when those leaders move on, as we saw in the Medtronic case.

To reiterate Deschamps' and Nelson's fundamental conclusion, "The mission of innovation leaders is to steer and support innovators. Governing innovation means making sure that innovators have as smooth a path as possible, that their commitment and hard work payoff as much and as often as possible." Their advice is well worth heeding for every organization who wants to become innovative.

Bill George
Professor, Harvard Business School
and former Chair & CEO of Medtronic

PREFACE: WHY SHOULD WE PAY ATTENTION TO INNOVATION GOVERNANCE?

Innovation has always been with us, as companies have had to keep innovating to survive and grow. As a consequence, innovation management has been a much discussed topic over the past 30 years, both in management literature and in practice. Scholars, consultants, and company practitioners have studied it and argued at length about what companies need to do to become effective innovators. But we believe the challenge is now leaving the narrow realm of specialists to become a broader and vital general management topic. Indeed, relentless technological progress and global competition over the past decade have put innovation at the forefront of most top management agendas. In short, innovation is no longer a "nice-to-have" capability that needs to be developed, notably in R&D. It is increasingly becoming a core competence of corporations because of its many strategic effects, its disruptive character, and its complex cross-functional and multidisciplinary processes. As such it deserves top management attention.

Today's innovation focus tends to be on building a comprehensive market-oriented capability by systematically addressing all the pieces of the puzzle, with a strong focus on process elements and cultural aspects. In most companies all these elements have been somehow identified and assembled. Process management has

been introduced. So has strategic portfolio management. Everyone agrees that an innovation-friendly culture and climate are essential. Customer management is also recognized, and managers are now spending a lot of effort in clarifying the "fuzzy front end" of innovation. Companies with a strong orientation toward either bottom-up or top-down innovation are trying to balance their focus. In short, management teams generally know what to do, at least in theory, to make their company effective, and yet many are not managing to turn their company into sustained innovators. Something is obviously missing! In some companies, it may be a lack of will or consistency in addressing innovation imperatives. In others, resources may be scarce. In yet others, management systems may be inadequate. In most cases, however, the missing element seems to be a holistic approach to innovation, considering it as an integrated system and implementing all aspects simultaneously while remaining open to unexpected environmental and market changes.

In our experience, the main cause of these obstacles is a dearth of innovation leadership at the top. Often, the problem is caused by a lack of continuity in leadership, especially given the acceleration of changes in top management. CEO tenures are getting shorter and many companies are experiencing the impact of mergers, acquisitions, and reorganizations due to globalization, not to mention a succession of economic crises requiring constant restructuring. The book *Innovation Leaders* addressed this aspect by characterizing the key traits of innovation leaders and highlighting the importance of aligning leadership styles with specific innovation strategies. But individual leadership or leadership among a small group of managers does not suffice. Organizational leadership is needed. Companies need to embed innovation into a comprehensive corporate governance system. This means that business leaders need to identify and address all the fundamental questions regarding the deployment of innovation. They must propose a set of values and policies on innovation, review their formal allocation of responsibilities for innovation, and put in place adequate supporting mechanisms. Equally importantly, they need a diagnostic system to help them decide whether their chosen approach will lead to their desired objective.

In many ways, innovation has joined the list of the big corporate issues that landed on the top management agenda and required a coordinated corporate response. Total quality management reached that level in the 1970s and 1980s; lean manufacturing practices followed in the 1980s and 1990s; and sustainability and environmental management have become hot issues in the last decade. In all cases, management has had to recognize that these challenges transcended functional boundaries and needed to be addressed in a coordinated way at a high level. This meant establishing a set of overarching values, a range of concrete policies and initiatives to support these values, a pyramid of measurements, and an auditing process to follow progress at the top level and communicate results. Last but not least, it meant assigning oversight responsibilities, also at a high level. In short, these big scale issues triggered the need for a real governance mechanism, at board and top management levels. In this book, we suggest that the same is now true for innovation. Innovation governance is turning into a new corporate imperative.

Innovation governance provides a frame for all activities related to innovation. It is akin to a company's innovation constitution. As a constitution, it has four broad roles.

First, it sets out all legitimacy aspects by defining and limiting the roles of the various players in innovation, and notably (1) who is really in charge and owns the whole innovation process; (2) who is responsible for what part of this process; and (3) what legitimizes the allocation of responsibilities.

Second, it establishes overarching goals for effectiveness and efficiency in utilizing resources and achieving results in terms of growth and competitiveness, and it specifies who decides on resource allocation.

Third, it proposes methods for handling conflict resolution, for example across functions and/or between business units and functions, and it specifies how complexity and ambiguity will be managed.

Fourth and finally, it pledges to guarantee the delivery of specific benefits to the various stakeholders – customers, employees, shareholders, and communities.

Innovation governance has to be consistent across the organization but adaptable to different parts of the process. It also needs

to be future-proof, i.e. to adapt to new market, technological, and other external trends. In short, as a constitution, it needs to be amended from time to time to fit closely with the company's changing environment.

This book has been written by experienced innovation management practitioners to help you rethink your innovation governance system, i.e. to enable you to change the way you allocate overall responsibilities for innovation in your company. It aims to guide you in establishing mechanisms that will ensure continuity of leadership in spite of changes in your company's management and environment. It illustrates the main models of governance proposed with real examples from companies, highlighting some of the challenges and success factors behind each model. It is neither an academic book nor a prescriptive "recipe-type" book. It aims to trigger reflections in the top management team on a topic that has seldom been addressed explicitly, even in highly innovative companies. It ought to enable you to consider whether there are more effective models for allocating responsibilities for innovation than the ones you are using today, and it will guide you on how to implement them successfully.

In summary, this book aims to provide a holistic and systemic approach to (1) understanding what innovation governance is, what it means, and what it entails; (2) recognizing possible governance models and their advantages/disadvantages; (3) assessing and improving current innovation governance policies and activities; and (4) advising on behavioral aspects that will help management make its governance effective. It will look at the innovation governance challenge from the perspective of both the board of directors – i.e. how should the board exercise its governance duties in the field of innovation? – and top management – i.e. how can senior leaders contribute effectively to the governance of innovation in their company given their own models of leadership?

In Part I, we shall start our innovation governance journey by characterizing the challenge. This means first clarifying the concept of innovation governance. Chapter 1 will do so by defining innovation governance as a form of organizational leadership at the corporate level that provides an overall frame for innovation. We shall describe the scope of innovation governance by listing the

questions that it addresses, both on the content side of innovation and on the process dimensions. We shall recommend that management ensures a high level of congruence between these various governance aspects and that they are regularly reviewed and updated as the company goes through various phases in its development.

Talking about governance raises the question of the role of the board of directors in "governing" innovation. Chapter 2 will address this question by recommending that the board be proactive and include an innovation aspect in each of its statutory governance missions. For example, the board should ask management to audit the company's innovation effectiveness regularly and to communicate its planned innovation strategy. It should require management to establish and monitor a set of key performance indicators regarding innovation and to regularly review the strategic risks linked with innovation. Finally, the board should ensure that new appointees – particularly in the CEO position – have the experience and talent to support the corporation's innovation focus.

Governing innovation is primarily a responsibility of the top management team. Chapter 3 will list six areas where management initiatives are expected: (1) setting the frame for innovation, in terms of vision, mission, and values; (2) specifying how the company will identify, create, and capture value from innovation; (3) establishing priorities and allocating resources for innovation as part of an explicit innovation strategy and plan; (4) assigning primary and secondary responsibilities for innovation and setting up supporting mechanisms; (5) identifying and addressing current obstacles in the company's organizational system, as well as sources of resistance within the structure; and (6) monitoring and evaluating results continuously.

Our journey will continue in Part II with an exploration of different organizational models for assigning both overall and support responsibilities for innovation.

Chapter 4 will explain what we mean by innovation governance model and why it is important to reflect on possible models before choosing one. Indeed, companies often need more than one model; they combine innovation governance models by choosing a primary model for allocating overall responsibility for innovation

and selecting one or several secondary models to support the primary model. These models go beyond merely allocating innovation responsibilities – they convey a general management philosophy, since they define the level of involvement of the CEO and his/her top aides and the company's preference for centralized or decentralized innovation responsibilities.

Chapter 5 will describe a number of models in use today, as well as examining how widely they are used. In some models, overall responsibility is entrusted to a single leader, whether solely dedicated to the task or not. In others, it is allocated collectively to several managers. In yet other models, the overall mission to steer innovation is entrusted to a permanent organizational mechanism. Surprisingly, some companies have even opted not to assign innovation responsibilities to any specific individual or group. Besides these primary governance mechanisms, most companies have established additional mechanisms to support innovation. Many of them are simple replicas of the main models, focusing on a specific part of the company or its processes. We will recommend that the choice of model be based on a systematic review of alternatives and their pros and cons.

Chapter 6 will raise the question of the perceived effectiveness or ineffectiveness of the various models – and the probable reasons – based on the results of a survey that we conducted. Indeed, companies express a rather mixed general assessment of their overall level of satisfaction with the innovation governance models they have put in place, definitely reflecting the need for a rethink! In fact, their level of satisfaction varies significantly according to the models they have chosen. In short, some models seem more effective than others, although no model scores better than 70% on effectiveness. We shall try to understand why all these governance models are deemed unsatisfactory in some cases and, for many, even in a majority of cases.

In Part III, we shall attempt to learn from the field and see how specific companies have chosen to organize for and lead innovation. We will highlight (1) how these companies have evolved and come to their current governance system; (2) the mission and characteristics of their system and the mechanisms they use to leverage their efforts; (3) what challenges they have to address and

how they see their governance model and priorities evolving over time; and (4) what lessons, if any, they have learned from their experience.

Chapters 7 and 8 will focus on companies that have chosen to lead from the top. In some cases, as exemplified by IBM, the CEO has assumed direct responsibility for innovation; in other cases, like Corning, it has been assigned to a subset of the top management team. We will highlight how the leaders of these companies are personally engaged and promote an innovation agenda, and what supporting models they use in their task.

Chapters 9 and 10 will focus on companies that have appointed an individual innovation champion. In some cases the champion combines overall responsibility for innovation with his/her functional job. This is frequently the case when the mission has been assigned to the chief technology or chief research officer – what we call the CTO or CRO model. The example of Nestlé illustrates this model at the highest level since the CTO is a member of the company's executive board. In some cases, the responsibility is seen as sufficiently important to be assigned to a fully dedicated leader. DSM, the Dutch life sciences and materials sciences company, has appointed a chief innovation officer reporting to the CEO.

Chapter 11 will describe the experience of a company with another form of governance system, in which responsibility is allocated to a group of managers who take on the mission collectively. What we call the board model – which generally involves a high-level, cross-functional innovation steering group – belongs in this category. The global packaging company Tetra Pak illustrates the board model and its evolution into a number of high-level councils.

Part IV will lead us to focus on concrete steps that leadership teams can take to design or upgrade their own governance system and make it work effectively.

Chapter 12 will describe how to start when building a new governance system. It will follow the example of Michelin, a large and innovative multinational, on its journey of rethinking the way it manages innovation and building a new innovation governance system from scratch. It will describe the steps the company is taking and the challenges it is facing.

Chapter 13 will propose a number of conditions that a governance system must meet to be effective. These imperatives deal with its scope, its management, its relationship with the organization, its transparency, and its capability to evolve over time as the company strategy and market conditions change.

Chapter 14 will stress the importance of aligning individual and collective leadership models to match these imperatives and challenges. This assumes that corporate leaders are able to identify their own model of leadership and understand the leadership and behavioral requirements of the different governance models. The ultimate objective is to build management teams combining different personalities and leadership styles in order to make governance effective.

To complement these recommendations, the appendix will list examples of concrete initiatives that a company can launch as part of its governance system. These specific actions deal with a number of areas, such as diagnostics and continuous improvement; innovation vision and strategy; innovation process and its management; organization and infrastructure; competences and attitudes; climate and culture; and, finally, allocation of innovation responsibilities.

Our ultimate objective is to stimulate members of the C-suite to go deeper than they otherwise might in identifying and allocating the levers of innovation under their direct guidance.

ACKNOWLEDGMENTS

This book has its roots in our long careers as innovation management practitioners, consultants, facilitators, and scholars. For over 20 years, the International Association for Product Development (IAPD) has provided a venue where leading innovators could gather for discussion, learning, and experimentation in the field of innovation. In the early 1990s, the IAPD began exploring new product development processes and practices, which inspired Beebe to co-author the book *New Product Development for Dummies* (Wiley Publishing Inc., 2007) together with Robin Karol. As time went on, IAPD became a leader in discovering the new frontiers of innovation. Our experience with this group of leading innovators – Beebe as co-director and then director, Jean-Philippe as the lead academic at a number of IAPD workshops – helped us to recognize that, once the early questions were resolved, the need for high-level oversight and leadership became increasingly urgent for sustained innovation performance. We observed significant differences between companies in the level of management commitment to innovation as well as in the way they allocated responsibilities for innovation and created innovation-enhancing mechanisms. This led us to recognize that, alongside individual innovation leadership – the topic of Jean-Philippe's latest book *Innovation Leaders* (Jossey-Bass, 2008) – companies need to deploy

an organizational form of innovation leadership, or what we describe in this book as *innovation governance*.

One of the first examples of innovation governance in action that we studied was at DSM, the Dutch life sciences and materials sciences company. Rob van Leen, DSM's chief innovation officer, agreed to open his Innovation Center to us and respond to our questions. This research resulted in an IMD case study, *DSM: Mobilizing the Organization to Grow through Innovation*, written in 2009 by Jean-Philippe together with IMD research associate Daria Tolstoy (IMD-3-2111). We would like to thank Rob van Leen for being so supportive and for encouraging us to pursue our investigations on this important topic. Chapter 10 highlights DSM's current innovation governance system.

Conscious of the need to document and assess the various organizational models of governance we had observed in our practice, Jean-Philippe initiated a research survey that IMD's learning technologies specialist, Alberto Brigneti, helped structure and put online. We thank him for his assistance. This survey provided a first glimpse of the way companies allocate their innovation management responsibilities. The results of this survey, which are summarized in Chapters 5 and 6, were presented by Jean-Philippe and discussed in an executive roundtable on innovation governance organized by Beebe at IAPD for its members. The meeting was held at Harley-Davidson in Milwaukee, WI, in September 2009. At the roundtable, several of the companies whose stories are the focus of chapters in this book offered their models of innovation governance as examples of how leading innovators are structuring this newly recognized task. We owe a great debt to these companies, which included DSM, Corning, and IBM, as well as to Sikorsky and Medrad which also presented their models, and to the companies that joined in the discussion – Harley-Davidson, Caterpillar, Eli Lilly, Herman Miller, and Shell.

Jean-Philippe, meanwhile, started discussing innovation leadership and governance issues at management development seminars held at IMD business school in Lausanne, Switzerland. The program directors of these seminars – Professor Ralf Seifert for Mastering the Technology Enterprise; Professor Leif Sjoblom for the Advanced Executive Development Program; and particularly Professor Bill

Fischer and MIT Professor Charlie Fine for Driving Strategic Innovation – keenly supported Jean-Philippe's teaching experiments on this new innovation governance topic. So did Professor David Robertson, who shared his experience with governance issues in a number of companies. Their support proved invaluable and encouraged him to initiate this book-writing project, which Beebe joined without hesitation.

Wiley's executive commissioning editor, Rosemary Nixon, and her staff, as well as her US Jossey-Bass colleague, Kathe Sweeney, accepted our book project with enthusiasm. We thank them for their continued support and confidence.

The project started with an intense two-day workshop together with Beebe and IMD Professor of Leadership and Management Development, Preston Bottger. Preston helped us define and frame some of the essential concepts of innovation governance. We owe a great deal to him for generously sharing with us some of his leadership development experience. His insights have helped us to define innovation governance in Chapter 1 and pay attention to the importance of clarifying one's own model of leadership, as summarized in Chapter 14.

We would like also to express our gratitude to innovation and management thinkers who have shared some of their concepts: Bob Tomasko in Chapters 2 and 14; MIT Professor Charlie Fine in Chapter 3; and innovation bloggers Paul Hobcraft and Jeffrey Phillips in Chapter 5. They have been and remain an invaluable source of inspiration for us.

This book would not have been possible without the enthusiastic support of busy executives and innovators who took the time to talk with us and help us build their stories to provide inspiration and examples for their innovation peers. As always, the credit goes to all those whose generous help allowed us to draw what we hope will be an extremely useful picture of how the task of governing innovation can be accomplished in a variety of companies. Any mistakes that may remain in our interpretation of their governance system are wholly ours.

In particular, we would like to thank Brigitte Laurent at Solvay for her insights in Chapters 3 and 5; Paul Aspinwall, a frequent participant and speaker at IAPD workshops, and Greg Golden for

their help on IBM in Chapter 7; and Bruce Kirk, also a frequent speaker and participant at the IAPD, for his help on Corning in Chapter 8.

Our research has also allowed us to delve deeply into the governance system of several multinational companies that have generously given us access to their CEO and C-suite officers. These high-level contacts confirmed us in our belief that nothing can replace senior leaders' firm and personal commitment to innovation.

At Nestlé, covered in Chapter 9, our gratitude goes to CEO, Paul Bulcke; CTO, Werner Bauer; executive vice president in charge of all strategic business units, Patrice Bula; head of Nestlé's Research Center, Thomas Beck; and head of the System Technology Center, Alfred Yoakim. We also appreciate the efforts of assistant vice president for corporate affairs, Ferhat Soygenis, in helping us edit Chapter 9. Finally we wish to express our appreciation to Professor Kamran Kashani who wrote the IMD case *Innovation and Renovation: The Nespresso Story* from which large excerpts are reproduced.

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