

PART I  
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**ADDRESSING  
THE INNOVATION  
GOVERNANCE CHALLENGE**

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## WHAT IS INNOVATION GOVERNANCE?

When business leaders hear the word “governance,” they may naturally think of corporate governance, “the system by which companies are directed and controlled.”<sup>1</sup> “It involves regulatory and market mechanisms, and the roles and relationships between a company’s management, its board, its shareholders and other stakeholders, and the goals for which the corporation is governed.”<sup>2</sup>

But what does the concept of *innovation governance* conjure up? Does it belong to the broader governance mission of the board of directors? Is innovation a sufficiently important challenge to be “governed,” i.e. directed and controlled at a high level? In many companies immersed in today’s global product and service competition, the answer is definitely yes. And innovation governance is not just a mission of the board, as we shall see in Chapter 2. It is clearly also a duty of the top management team, as we will emphasize in Chapter 3 and the rest of this book.

But before we try to define it, let us first briefly review current managerial responses to the governance challenge in respect of innovation, i.e. reflect on the way companies effectively stimulate, steer, and sustain a complex cross-functional and multidisciplinary activity like innovation.

### THE INNOVATION MANAGEMENT CHALLENGE

Most large corporations are organized around three axes – business units, regional operations, and functions – which management knows how to steer and control effectively. In addition, these corporations have generally gone further by allocating specific responsibilities and setting up dedicated mechanisms to manage cross-functional processes – a fourth dimension – for example, for new product development. Innovation does indeed consist of several cross-functional processes. But there is more to it than processes. Innovation deals with *hard* business issues like growth strategy, technological investments, project portfolios, and the creation of new businesses. It also includes *softer* challenges, like promoting creativity and discipline, stimulating entrepreneurship, encouraging risk taking, promoting teamwork, fostering learning and change, and facilitating networking and communications. In short, it requires a special type of organizational culture. Like customer focus, innovation is a mindset that should pervade the whole organization.

The scope of innovation is so broad that few companies appear to have thought carefully enough about what it takes now and will take in the future to stimulate, steer, and sustain innovation in an integrated way, across all its aspects. Many companies do not have an overall frame that integrates all these hard and soft innovation aspects under proactive top management supervision. Management today needs a holistic system that sets and aligns goals, defines policies and values, prioritizes processes, allocates resources, and assigns roles, responsibilities and decision-making authority to key players. And that system has to originate from the C-suite. This is the task we call *innovation governance*. The word “governance” is appropriate here because stimulating, steering, and sustaining innovation is a mission that cannot be delegated to any single function or to lower levels of an organization. It remains a top management responsibility and preserve.

Of course, the CEO personally or the C-suite collectively can decide to take on the innovation challenge directly, as a top management responsibility, and thus “govern” innovation proactively as

a group. This often happens in start-ups – especially technology-based ones – that grow big. But in our experience, this level of top management ownership and direct involvement in innovation is rare in large and traditional corporations. In many cases, in spite of all the risks that it creates – including lack of integration, short termism, and strategic myopia – management has delegated the responsibility for innovation to different individuals or groups, for example to marketing for improvements to existing product lines, or to R&D for exploring new technologies.

Ad hoc organizational solutions to the governance challenge may work well for some aspects, typically those dealing with process management issues and extensions of current businesses and activities. But many such solutions fail to meet other aspects of the innovation challenge, for example those dealing with the sustained creation of radically new growth businesses or simply with culture change.

Given the newness of the term and of the concept behind it, we should first define what innovation governance really means and determine its scope.

## **DEFINING INNOVATION GOVERNANCE**

In a recent management development seminar at IMD business school in Lausanne, Switzerland, on the theme of innovation governance, the participants – all senior managers vastly experienced in the field of innovation – proposed the following list of innovation governance responsibilities:

- defining roles and ways of working around the innovation process;
- defining decision power lines and commitments on innovation;
- defining key responsibilities of the main players;
- establishing the set of values underpinning all innovation efforts;
- making decisions that define expectations;
- defining how to measure innovation;
- making decisions on innovation budgets;

- orchestrating, balancing, and prioritizing innovation activities across divisions;
- establishing management routines regarding communications and decisions.

This list provides a good first description of the scope of innovation governance but it is worth going further and introducing a structure to capture the various facets of innovation governance.

There are two complementary ways to define innovation governance. The first is to equate it to a collective form of *organizational leadership* with regard to innovation. The second is to compare it to a corporate *innovation constitution*.

### **Innovation Governance: An Organizational Form of Innovation Leadership**

At the start of the Driving Strategic Innovation executive development program, which IMD offers jointly with MIT, we like to frame innovation in a broad leadership perspective by introducing Jay Galbraith's organizational star model.<sup>3</sup> It consists of five elements:

- strategy (including vision, market direction, competitive advantage, and differentiated offerings);
- structure (including power and authority, reporting relationships, and organizational roles);
- processes (including integrative roles, lateral connections, and idea and knowledge flow);
- rewards (including goals, scorecards and metrics, values and behaviors, and compensation); and
- people (including staffing and selection, performance feedback and learning, and development).

It is the role of leaders, we believe, to reflect on each of these five dimensions in order to make them conducive to innovation, and to ensure that they are internally congruent. In other words, each element has a direct impact on the company's ability to innovate, and a single misalignment – for example if management

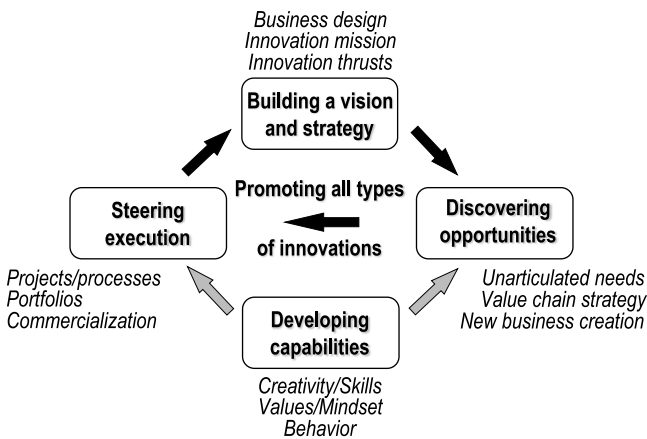
punishes risk taking and failures in its performance evaluation and reward system – can ruin the company’s efforts.

This framework reminds managers that innovation has a broad organizational leadership aspect that goes beyond the traditional emphasis on culture and processes. It thrives when leaders adopt a comprehensive perspective and understand how each part of the system influences overall performance; it fails if one of the elements is missing or counterproductive.

Building on this broad organizational leadership perspective, we can define the scope of innovation governance as a combination of five concrete missions for management (refer to Figure 1.1). In the rest of this section we will address each of these missions and reflect on how they define and impact on governing innovation.

Innovation governance starts with a management commitment to promote many types of innovations, i.e. to encourage everyone in the organization to consider opportunities for innovation in all aspects of the company’s offerings and in all its internal and external processes. This first governance mission is so critical that we will explore it in more detail later in this chapter.

Besides this missionary call for breadth in perspective, the innovation governance duties of management are fourfold.



**Figure 1.1:** The Scope of Innovation Governance

### ***Building a Mission, Vision, and Strategy for Innovation***

As part of this first innovation governance element, management should reflect on and explicitly address three fundamental questions:

- *Why innovate?* What benefits can we expect from innovation, or what penalties might we incur if we fail to innovate?
- *Where to innovate?* In what areas should we focus our innovation efforts to implement or reinforce our business strategy?
- *How much to innovate?* How much risk can we bear in our innovation drive, and how many resources are we ready to commit to it?

#### **Unwillingness to Resource Projects?**

A large company that serves the medical industry had grown primarily by acquisition. The executive team decided to launch a growth by innovation strategy and appointed a director of innovation. After several years, despite devoting resources to finding innovation opportunities, the group portfolio management team had canceled every suggested project because it was not willing to resource projects that would not build upon existing product lines and pay off in the short term.

It is critical that management make its expectations explicit regarding *why*, *where*, and *how much*, and that these expectations are widely known in the company. Some companies waste scarce resources pursuing opportunities that, in the end, are sidelined or canceled, not because further research shows them to be less likely to succeed, but because management does not adhere to its own guidelines. Management must also make explicit its own willingness to pursue different levels of innovation. Too often, for example, management pays lip service to radical innovation, but fails to fund the projects that emerge from early stage innovation initiatives.

It is imperative that management also take the time to reflect on these questions. Different members of the management team are likely to have different mental models or implicit assumptions about innovation, often



stemming from their own experiences. Unless they have the opportunity to reflect together, to discover where they agree and disagree, their actions and decisions are likely to contradict the mission and strategy as they have been defined.

***Discovering Opportunities for Innovation***

One critical capability to be developed as part of the company’s innovation strategy is “foresight,” or the ability to track weak signals and sense emerging trends in the market, in customer behavior and preference models, and in technologies. Building foresight is a complex process which requires launching efforts to collect market/customer, competitive, and technological intelligence. It requires a company-wide attitude of openness and curiosity and, possibly, the establishment of small specialist departments to constantly scan the environment for weak signals of change and emerging trends, particularly from outside one’s own industry.

Many large R&D departments have set up such a capability, appointing a number of technology gate-keepers to follow the progress of new technologies. In recent years, product management and commercial managers have also begun to dedicate valuable resources to long-term market and competitor intelligence activities.

**Myopia in Smartphones?**

The past decline of Nokia and RIM (Blackberry) in smartphones can be attributed, at least in part, to their inability to spot – or their unwillingness to follow – a radical change in the market. Both sold their smartphones primarily to the professional segment of managers and neglected the consumer market, which Apple targeted first with its iPod Touch® and later with its iPhone, followed by Samsung and other Android phone manufacturers. Equipped with a user-friendly touch screen and a growing number of applications, these phones became an attractive alternative to the competent but dull professional smartphones of Nokia and RIM. Professional users quickly convinced their IT department to buy the new fun and “app-rich” smartphones, leaving the two former leaders in a difficult catch-up mode.

These activities include gathering ethnographic information about customers and their wants and needs (in particular so-called latent needs, of which the customer is unaware), building groups of industry “thought leaders,” and participating in conferences and other gatherings where it is possible to rub shoulders with technologists and customers. However, many companies run the risk of myopia, failing to sense new opportunities or failing to commit to them once they have been uncovered. Product managers may

**Foresight Lacking  
at Unilever?**

A former head of research at Dutch food giant Unilever recalled that one of the major trends that impacted the profitability of his company in the past – the microwave oven revolution – took the company by surprise because it had emerged outside the food industry. By triggering a trend toward ready-meals and fatless cooking, it noticeably reduced purchases of margarine, one of Unilever’s most profitable product lines. He claimed that no one in marketing had anticipated the development of the new cooking technology and its impact on margarine, since product managers were too busy scanning the development of other fat categories, like butter and oil.

be tempted to look narrowly at the boundaries of their competitive arena and stick to the paradigm on which they built their business. Marketing managers’ perspective is often more operational than strategic, which leaves them boxed in as they try to use incremental improvements to compete in the same markets. R&D can certainly become stuck in a commitment to its own technology and ignore potential disruptive changes. The examples of Nokia and RIM highlight the potentially dramatic consequences of such myopia.

The challenge is to establish appropriate boundaries to frame the search for intelligence. If the scope of the search is too narrow, as the examples of Unilever (see box), Nokia, and RIM show, there is a risk of myopia. If it is too broad, then the company may become lost in an endless search for irrelevant trends.

It is therefore important to stress the role of top management, as part of its innovation governance mission, in ensuring that the organization remains in a mode of constant alert to external trends that could disrupt the com-

pany's activities and/or create new opportunities. Besides accepting the costs linked to this search for intelligence – some see it as an unnecessary overhead – leaders need to adopt an attitude of extreme openness to external changes, as well as humility to challenge the company's implicit beliefs. Andy Grove, the legendary former CEO of Intel, called it necessary management “paranoia.”<sup>4</sup>

### ***Steering the Execution of Innovation Projects***

Of all the innovation governance elements, steering the execution of innovation projects is probably the one that has received the broadest recognition. It was the first innovation issue to be recognized. In the 1980s and 1990s, companies and the academic community began to pay attention to two critical execution activities: (1) optimizing the project pipeline, which includes project resourcing and ensuring that the collection of projects in the pipeline fulfills the innovation strategy; and (2) steering the execution of innovation projects by multifunctional teams by designing and implementing phase/review processes. These processes are designed to manage the tasks as well as the critical decisions of developing a new offering. They make it possible to start a project, while delaying the decision to invest significant resources until enough information has been gathered to be able to judge the likelihood of success. The logic of the phase/review process makes it possible to begin attractive but risky projects with low initial investments. As often happens when addressing complex and systemic issues, it was first seen as a simple linear process – from idea to commercialization. As understanding of the linear process grew, companies and consultants and academics were able to appreciate more subtle aspects, so execution now includes many more factors.

In steering the execution of innovation projects, management should address three new questions, which will be explored in more detail later in this chapter:

- *How to innovate more effectively?* What approaches should we adopt to meet our innovation objectives and how can we mobilize our organization behind this challenge?

- *With whom to innovate?* What are the purpose, scope, and process of an effective open innovation strategy and approach?
- *Who should be responsible?* Who should be the owners of our innovation efforts, and what organizational models will we choose to steer innovation?

The role of governance with respect to execution is to ensure that the necessary processes exist and are being used optimally. Many companies have appointed process owners, who are responsible for implementing and improving processes. Corning, for example, uses a kind of ethnographic methodology to assess how well a process is working for those whose work is framed by it, in order to make sure that improvements are targeted and necessary.

There is, however, a problem that has become more severe in recent years. Now that companies do not need to design processes from scratch, there is a temptation to over-perfect them. Processes should of course be improved when necessary – but management should guard against over-engineering processes, spending more time on them than what they can do for the market warrants.

### ***Developing Innovation-enhancing Capabilities***

Innovation-minded leaders are generally aware of the need to enlist as many of their staff as possible in focused innovation management development programs. Of course, innovation requires a range of hard skills, such as new technological competencies or advanced commercial proficiency. These are generally offered as part of the company's traditional training programs. They are needed in most circumstances, but they are not sufficient. At least four other categories of softer skills essential for innovation also need to be developed:

- Customer sensing – understanding customers' evolving hierarchy of preferences and subtle patterns of adoption. What used to be called “the fuzzy front end of innovation” is now more widely referred to as just “the front end of innovation,” and there are many excellent processes to guide the search. These techniques, which must be learned by a broad range of people,

include mapping technologies, ethnographic customer research, and so on.

- Idea and concept evaluation and validation – being able to screen and rank ideas and precepts generated through an ideation process against the company’s strategic criteria. Here again, processes and tools to accomplish this are widely available and can be shared with a broad range of managers.
- Team management – creating a culture and processes that foster collaboration within projects and across functions and levels. This type of training is essential at the beginning of important projects to help team members to bond and encourage them to cooperate with one another while maintaining a healthy confrontation of ideas.
- A to Z project and venture management – including knowing how to reduce the range of technical and market uncertainties as a project progresses, and how to assess the changing value of the project in terms of its fit with strategy, with the proposed portfolio of new offerings, and with offerings already in the market.

Besides ensuring that such skills are being nurtured, innovation governance also promotes critical innovation-enhancing values and behaviors. The range of values to be promoted is long and well known, since they are constantly repeated in the management literature:

- user orientation and customer intimacy;
- curiosity; openness to the external world and to ideas from all over;
- risk taking, tolerance of failure, and learning from failures;
- teamwork and collaboration across all hierarchies and organizational units;
- entrepreneurship and a bias toward a “just-do-it” attitude;
- experimentation and a tendency to build prototypes very early;
- professionalism in project management; respecting timing and budgets; and
- speed and a sense of urgency.

The role of top management and particularly the CEO in this area is critical, since concrete examples – and not just

exhortations – must always come from the top. It takes a lot of repeated efforts, in words and deeds, to propagate these values across the organization and make them stick.

### **Innovation Governance: A Corporate Constitution on Innovation**

Alongside organizational leadership, the second way of defining innovation governance is to think of it as a corporate innovation constitution. In many ways, innovation governance provides a frame for all innovation activities by defining the roles, powers, and limits of the various players, and organizing the functioning of all innovation-related processes. A form of constitution is indeed necessary for an activity that cuts across most organizational units and is not subject to a hierarchical pyramid. Innovation is highly dependent on people's motivation, behavior, and interrelationships. When a company sets up a proper innovation governance system, like a constitution, it is trying to contain individual and functional interests, such as power-hungry moves, and to broaden the scope of everyone's thinking in favor of corporate interests. Of course, the bigger the company and the more complex the organization, the more important this type of constitution becomes.

Concretely, as the innovation constitution of the company, governance articles must cover four different and complementary elements:

- They should establish rules of legitimacy by defining (1) who owns what; (2) who does what; (3) who is responsible for what; and (4) what legitimizes the allocation of responsibilities. This means assigning responsibilities for various parts of the overall process, identifying decision-making authorities, and showing the extent to which all parts and players fit within an overall model of innovation.
- They should state what management sees as a desirable level of efficiency and effectiveness in the utilization of resources and achieving results. This can include targets for growth and

competitiveness, financial boundaries in attaining them, and concrete performance measures to be monitored by management to check whether goals are being attained.

- They should propose methods for conflict resolution. Despite the existence of clear rules regarding responsibilities and decision-making authorities, conflicts are bound to appear, particularly when innovation activities interfere with normal line responsibilities in terms of resource allocation or priorities. This is why management has to intervene on some occasions, without depriving the various functional players of their allocated responsibilities.
- They should state how the company intends to protect the interests of various stakeholders – customers, users, suppliers, employees, communities – other beneficiaries and/or potential victims of the company’s innovation activities. For example, agrochemicals manufacturers could include in their innovation constitution firm principles regarding long-term environmental protection and commit publicly to adhere to them, irrespective of profit or growth objectives.

## **WHAT DOES INNOVATION GOVERNANCE ENTAIL IN PRACTICE?**

Leaving broad principles behind, the rest of this chapter will focus on two practical questions: (1) how broadly should we define and promote innovation? and (2) what specific questions does innovation governance address, with regard to both the *content* and the *process* sides of all innovation activities taking place in the company?

### **How Broadly Should We Define and Promote Innovation?**

As we suggested earlier, one of the key roles of management in governing innovation is to ensure that the term itself is defined broadly, something that is often overlooked. At IMD, when we

contacted our clients' management development specialists to market a new program – Managing the Innovation Process – these HR officers automatically directed us to their R&D colleagues, as if innovation was the exclusive preserve of technical functions. This reflects a general belief that innovation deals with new products and new technology, and thus primarily involves R&D. We had to fight this prejudice to attract managers from other functions to our seminars and convince them that there is much more to innovation than R&D. This is why it is so important to stress that one of the key tasks in innovation governance is promoting and steering all aspects of innovation, not just new products.

Defining and promoting innovation broadly means at least four things for senior managers. It involves:

- looking at all types of innovations and enriching projects through multiple innovations;
- encouraging a series of incremental innovations, but also seeking breakthroughs to achieve a balanced innovation portfolio;
- paying attention to all the subprocesses within innovation, broadly defined; and
- combining and balancing management-led top-down innovation and spontaneous bottom-up innovation.

### ***Looking at All Types of Innovations and Enriching Projects through Multiple Innovations***

Left to their own devices, most business leaders might be tempted to stay within their comfort zone and focus their innovation efforts on only a few areas, typically new technologies, new products, and manufacturing processes, since these correspond to their main functional emphasis. It is top management's responsibility, as part of its governance mission, to make its businesses think more broadly and stimulate them to explore opportunities in a number of other areas.

Many well-accepted innovation typologies can be used for this purpose. The one we prefer is adapted from an original model



promoted by the Doblin Group.<sup>5</sup> It points at innovation opportunities across the value chain.

- Innovating on the company’s business models, e.g.
  - reorganizing the business to restructure the value chain;
  - introducing new revenue sources and/or a new and different revenue model;
  - creating new sourcing partnerships.
- Innovating on processes, e.g.
  - building an advantage in enabling processes;
  - innovating on the company’s core process.
- Innovating on the company’s offering, e.g.
  - pioneering a new product or system concept;
  - launching a new technology with a better quality/price performance;
  - focusing on new product features and attributes;
  - building and offering new product platforms to others;
  - extending the offering with new service products.
- Innovating on the company’s way to go to market, e.g.
  - building new distribution channels;
  - repositioning the brand creatively;
  - focusing on activities that enhance the customer experience.

Once everyone in the organization is aware of this typology, management needs to encourage teams to search for combined innovations, i.e. to try to uncover and work on other relevant innovation categories. Many products or services that have sustained a strong market position over the past decades – think of Apple’s iPod/iTunes, P&G’s Pringles potato chips, and IKEA’s furniture business – are the result

**Innovation Matrix  
at Lego**

Managers at Danish toy manufacturer Lego use an innovation matrix adapted from the Doblin Group model. It consists of eight different types of innovations: core processes; enabling processes; product offering; platform; messaging; customer interaction; sales channel; and business model. This matrix was used by the development team of its Mindstorm NXT® product to map out a series of reinforcing complementary innovations.

Looking for opportunities to “enrich” projects

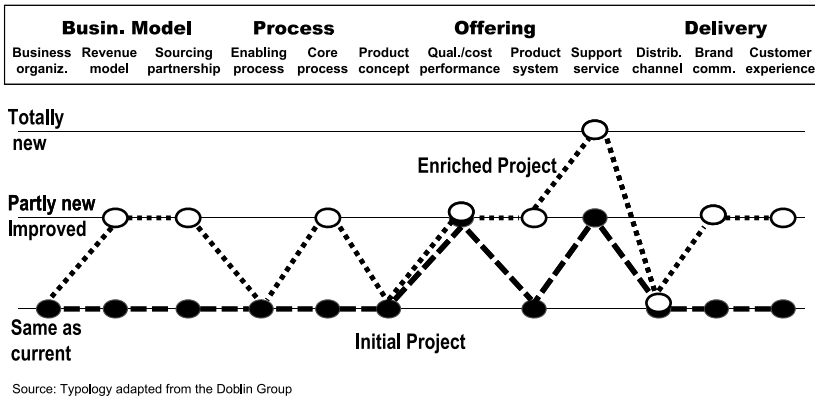


Figure 1.2: Innovation-type Scorecard

of combined initial innovations. They all embodied innovations in product concepts, of course, but they also brought together new approaches in business organization, business models, processes, services, and marketing. The power of combined innovations is so potent in creating a sustainable competitive advantage that some companies, like Lego, expressly demand it.<sup>6</sup>

It is therefore good practice for management to insert a mandatory innovation-type scorecard in a company’s project review system. This scorecard reminds project teams and the reviewers that they are expected to explore the introduction of relevant new approaches in their new undertakings.

Figure 1.2 shows the innovation scorecard of an actual project plan, before and after review by management. The initial plan was rejected as too conventional and, after extensive discussions, brainstorming and feasibility studies, the more ambitious project plan was approved. This type of approach requires that project review committees include managers with a broad perspective on innovation.

Management must be aware, of course, that the more innovations that are introduced in a given project path, the riskier the project becomes. It must therefore balance its ambitions to maintain an acceptable project risk profile.

***Encouraging a Series of Incremental Innovations, but also Seeking Breakthroughs to Achieve a Balanced Innovation Portfolio***

Although a few companies seem to have adopted a permanent breakthrough culture – this was certainly the case with Apple under Steve Jobs and it is still valid for Google – most companies tend to favor incremental innovations over more radical ones. This often reflects business managers’ perception that taking undue risk on a project will attract management’s attention and, ultimately, disapproval. Although risk taking is encouraged and failures are *officially* accepted – at least in principle – in companies’ innovation credos, they may not be totally forgotten when the time comes to review individual performance.

Yet sustained innovators tend to be found among companies that combine a stream of incremental innovations with an occasional breakthrough that creates a new market space. A good example is Toyota, with its *kaizen* approach to traditional product improvements combined with its pioneering development of hybrid vehicle technology. Encouraging a search for radical innovation opportunities in the hope of achieving a breakthrough is therefore part of top management’s innovation governance mission. Concretely, this means that risky breakthrough projects must be provided with a different management supervision, team, budget, and process path from incremental ones.

As the Tetra Pak example illustrates, one of the most effective ways to promote breakthrough projects is for management to play

**Tetra Pak’s Level 1 Projects**

Members of the group leadership team (GLT) at Tetra Pak, the Swedish carton packaging giant, have a specific process to manage radical innovations, which they call “level 1” projects, in addition to their standard new product development process. Every “level 1” project has to be led by a business manager and is coached personally by a member of the GLT. Management expressly indicates that it expects a high mortality rate from these projects and it does not hesitate to stop many of them mid-course when prospects look unfavorable.

a direct role in initiating them and thereafter in sponsoring and supervising them.

By sponsoring high-risk projects while the rest of the company pursues incremental innovation projects, management can transmit important messages to the organization:

- Why management is pursuing these projects, i.e. what are the objectives and potential contributions of the projects?
- What failure rate, hence yield, management considers as “normal” given these projects’ level of risk.
- How management intends to manage and supervise these projects to guarantee maximum control, risk containment, and transparency.
- How these projects will be turned into an ongoing operation if/when successful, and to what unit they will be allocated.

### ***Paying Attention to All the Subprocesses within Innovation, Broadly Defined***

Management must also make clear that innovation extends well beyond the traditional project-related processes that companies often refer to as NPD (new product development). Indeed, innovation starts well before and ends well after the NPD process. The book *Innovation Leaders*<sup>7</sup> suggested that management should adopt a broad look at innovation by paying attention to and structuring its eight constituent *i*-processes. Four of these relate to the upstream part of innovation, i.e. the creative *Invention* phase:

- *Immersion*: As we have stressed above, immersion in the market using practices like visiting customers is critical for identifying unarticulated customer needs. For R&D it is important to explore existing and emerging technologies to uncover potential sources of improvement, innovation, and/or disruption.
- *Imagination*: This process is rarely formalized. Yet, innovation always starts with imagining a solution to an untapped customer need or market opportunity. Imagination is a process of concrete visioning or “realistic dream making.”

- *Ideation*: This is generally where a company's NPD process starts. It is the creative part of the innovation process as ideas are collected or generated, clustered, screened, and ranked before being converted into preconcepts and validated.
- *Initiation*: This process tends to be visible to all because, once a business case has been approved, a formal project is created with an official brief and budget, a project leader and a team, and often a review mechanism.

The other four processes deal with the disciplined *Implementation* phase:

- *Incubation*: This process is often under management scrutiny because it is concrete: real work starts for the cross-functional project team with product design and prototype building and testing, and the project proceeds across a range of formal review gates.
- *Industrialization*: This process receives even more management attention since it generally starts with a formal go/no-go decision and continues with a range of investments in tooling and manufacturing equipment before the production phase starts.
- *Introduction*: Although critical for success, this process is not always considered as an integral part of the innovation process. Yet it starts and proceeds in parallel with product development up to the roll-out phase and thus needs to be fully integrated.
- *Integration*: This process (integration of the company's offering into its customers' operations to make them successful) is also part of innovation. It tends to be fully integrated only in those industries that depend on the strength of their technical service or application engineering.

As we have suggested, companies often see the NPD process as starting with ideation and ending with industrialization, which is a rather narrow perspective. So, as part of their governance duties, senior managers need to insist on the first two processes – immersion and imagination – which create the context within which innovation will take place, and the last two – introduction and integration – which will shape market success. They must

ensure that these processes are reasonably mapped and understood and that adequate tools are developed to assist in their implementation.

### ***Combining and Balancing Management-led Top-down Innovation and Spontaneous Bottom-up Innovation***

Thinking about innovation broadly raises the question of its origin or mode of occurrence. Innovation can indeed be a spontaneous

#### **Post-it Notes: Typical Bottom-up Innovation**

In his introduction to *New Product Development for Dummies* Dr Geoffrey Nicholson, retired 3M vice president, writes: "I can tell you from my experience in championing Post-it Notes that we had to have passion and courage. We were told several times by management to kill the program." It is often the role of the top level sponsor to challenge his or her peers in order to preserve a suitably aggressive appetite for innovation.

bottom-up phenomenon, driven by the creativity and entrepreneurial spirit of a company's staff. But it can also result from a visionary and ambition-led top-down initiative introduced by management. The two modes of occurrence are, of course, not mutually exclusive. In fact, they are very complementary.

Some companies have a strong tradition of bottom-up innovation. They rely on initiatives from their staff and give them the necessary freedom to come up with new ideas and concepts, which may lead to new business opportunities. In these companies, management sees its role as promoting and supporting front-end innovators, shielding

them from possible "idea killers." It also focuses its intervention on filtering ideas and funding the best ones. Archetypal innovators like 3M and Google probably exemplify bottom-up innovation at its best. Their management has set up systems and rules to support it, notably giving individuals the freedom to work on their own ideas (15% of their time at 3M and 20% at Google). Creating these innovation-enhancing systems and rules to encourage bottom-up innovation is an important part of innovation governance duties.

But relying on bottom-up innovation alone may be insufficient, particularly when circumstances or opportunities require the launch of major costly or complex innovation initiatives in a top-down mode. This type of management-inspired innovation is often found in Asian companies, particularly in technology-intensive industries requiring significant R&D and capital investments. It requires the ability to build and share a vision; a talent for mobilizing the organization behind that vision; and determination to persevere in spite of possible initial problems.

So, understanding the conditions under which bottom-up and top-down innovation will prosper, determining the right balance between them, and adopting management attitudes that will facilitate the two innovation modes are essential elements of innovation governance.

## **What Specific Questions Does Innovation Governance Address?**

### ***Questions Dealing with the Content of Innovation Efforts***

As mentioned earlier in this chapter, to review whether their company has adopted a comprehensive innovation governance system, leaders need to start with three distinct types of questions about the content of innovation: Why innovate? Where to look for innovation? And how much to innovate? Good innovation governance starts with providing clear answers to these three questions.

#### ***Why innovate?***

This basic question may seem mundane or unnecessary, particularly to senior managers with a strong innovation commitment, but is it in fact *that* obvious? Does everyone in the organization have the same clear understanding of the mission, purpose, and objectives of innovation for the company? In short, does everyone know – and share – the reasons why innovation is necessary and how this imperative relates to the corporate vision and objectives?

Answers to the *why* question vary from company to company, and for the same company from time to time depending on economic, competitive, and environmental circumstances. For example, companies in a strategic stalemate position, with few opportunities to compete effectively, may look at innovation as a way to generate a totally new business model, and hence to grow profitably. Others may expect innovation to reinforce their current businesses to win a sustainable advantage. Still others will see innovation as a powerful means to build a winning brand reputation and attract and motivate top talent. There are, indeed, many reasons to innovate.

In summary, it is not a vain exercise for the top management team to spend some time, for example in a management retreat, addressing the *why* question. In fact, it is critically important to iron out differences in perception among the members of the C-suite. As we have said above, executives can have differing assumptions and mental models about innovation. To make the company's position explicit, and to ensure that management will be consistent, managers must create a culture in which frank and open dialogue is a regular practice and the resulting position is communicated clearly to the rest of the organization. This should be the starting point for all innovation governance missions.

### *Where to look for innovation?*

Defining the real purpose and objective of innovation leads naturally to the next question: Where should we focus our efforts and what should our priorities be? Of course, innovation is needed in all business areas, and management should promote a wide open scope for the company's innovation activities. But in some instances, innovation needs to be focused. It will better serve the business if it boosts what really matters for the success of the company.

Useful questions are: What does our strategy call for? Do we need more and better new products? Are we mainly looking for lower costs? Are we searching for better service and attractive customer solutions? Do we need to develop more robust business models? Are we ready to build new ventures that will expand the scope of the business? Management cannot escape the responsibility of determining priorities for innovation, and these may change



with economic and competitive circumstances. In a real business crunch requiring drastic restructuring, management may want to change the focus of innovation activities from, for example, new product proliferation to product line rationalization and cost cutting.

Clearly defining and broadcasting the focus and priorities of innovation – where and on what we shall innovate – is therefore a second vital element of innovation governance.

### *How much to innovate?*

There are two very different types of how much questions. The first deals with the issue of innovation funding, while the second refers to the intensity or ambitiousness of our innovation efforts and our innovation risk portfolio.

Determining the desired level of innovation is important from a funding point of view. Break-through innovations should not be pursued unless management is ready to commit the necessary resources to implement them fully and market them aggressively. It is not uncommon to see companies having to shelve promising radically new product or service concepts simply through lack of resources, given the current demands of their existing business. Such situations could be

### **Innovating to Cut Costs, not Jobs**

In the 2008 economic and business crisis, a socially responsible European company benefited by launching a specific innovation drive that mobilized its entire staff. Management's objective, which was supported by the company's union representatives, was to unleash operational savings opportunities to achieve some of its cost-cutting objectives while minimizing job cuts. This helped to maintain employee morale and prepare the company for an economic upturn.

### **Shelving an Innovation for Lack of Funds**

A leading automotive components manufacturer found itself unable to fund a very large investment for the production and launch of a radical innovation. Its proponents had not reckoned with the fact that all the company's investment capacity had been committed to supporting the company's aggressive development in China. The radical new product had to be shelved, at least temporarily!

avoided if management expressed clearly from the start its innovation expectations and investment constraints, a definite part of its innovation governance mission.

Defining how much innovation we want is also important in determining the risk we are ready to bear to meet our objective – be it building a revolutionary new market category or developing an advantage over competitors – and the sustainability of the anticipated reward. In other words, are we searching for breakthroughs and hence accepting a high level of uncertainty? Or do we instead favor a more prudent approach by encouraging a series of incremental innovation moves? Or do we expect both and, if so, in what proportions and for what objective?

These questions need to be clarified to ensure that managers fully understand the company's risk/reward boundaries in their search for new ideas and opportunities.

### ***Questions Dealing with the Process of Innovation***

Good innovation governance requires three additional questions to be addressed regarding the practical aspects of innovation activities: How to innovate more effectively? With whom to innovate? And who is going to be responsible for what regarding innovation?

#### ***How to innovate more effectively?***

Judging by the number of books, research articles, and public seminars devoted to the practical aspects of innovation, this question is, and will remain, on the agenda of most companies, even the most innovative ones. It has also triggered the growth of many service providers and consultancies to guide them in their quest. How can we boost innovation? What approaches should we adopt to meet our innovation objectives? How can we mobilize the organization behind this challenge? Employees expect clear direction from management to help find the answers.

These questions, which are at the heart of any innovation governance initiative, deal with process issues, i.e. what process will

take us most time- and cost-effectively from new market needs and ideas to successful market introduction? What organization does this require? What tools should we use for implementation? What measures should we track? But they also raise a number of culture challenges that management somehow has to address despite their complexity. How do we foster a

**Process Paralysis?**

An executive at a power company complained: “We have all the processes for innovation we could ever need! The problem is we spend all our time trying to do what the processes call for, and almost no time really innovating!”

climate that combines creativity *and* discipline? A culture in which sensible risk is encouraged? An environment that facilitates networking and communication in all directions? A compensation system that encourages entrepreneurship and teamwork?

*With whom to innovate?*

The concept of open-source innovation – building on ideas and technologies from third parties – is now pervading most businesses. Many companies advocate it as part of their innovation strategy, but advocating it is not enough. The management team needs to define: Its purpose – why do we engage in open innovation? Its scope – what are we looking for and how far are we ready to go in our partnership and alliance strategy? And its implementation process – how should we proceed to create win-win opportunities? Companies that have followed the recommendations of management scholar Henry Chesbrough<sup>8</sup> (Professor and Executive Director at the Center for Open Innovation at the University of California, Berkeley) and embraced the open innovation challenge, like P&G,

**Eli Lilly’s Office of Alliance Management (OAM)**

It has helped the company to manage and improve its partnerships and alliances. OAM recommends: Don’t expect alliances to work on their own; help alliance partners to develop a common language; and keep track of what works and what doesn’t.

Eli Lilly, and Philips among many others, have clearly included it in their innovation governance agenda.

*Who is going to be responsible for what regarding innovation?*

The *who* question is the last but by no means the least important innovation governance question. It deals with defining and allocating specific innovation management responsibilities at all levels. As part of it, management needs to choose the overall governance model or mechanism that will stimulate and orchestrate all innovation activities in the company. It will identify the owners of all key innovation processes and help in deciding whether to allocate innovation management responsibilities to a dedicated group of managers, as opposed to current business and functional managers. If dedicated innovation managers – whatever their title – are appointed, management will have to define their role, reporting level, resources, and degree of empowerment in relation to the line organization and other established staff functions.

In summary, if sustaining innovation is an important corporate objective, it is essential to address explicitly the six questions listed above – three on *content* and three on *process*. In this chapter, we have tried to provide a broad definition of all aspects of innovation governance. In the next two chapters, we shall see, concretely, what innovation governance means at the board of director level and for top management.

## NOTES

<sup>1</sup> <http://www.ecgi.org/codes/documents/hampel23.pdf> (Cadbury Committee, 1992) European Corporate Governance Institute.

<sup>2</sup> OECD *Principles of Corporate Governance*, 2004, OECD. <http://www.oecd.org/dataoecd/32/18/31557724.pdf>. Retrieved 2011-07-20. Tricker, A. (2009). *Essentials for Board Directors: An A-Z Guide*. New York, Bloomberg Press.

<sup>3</sup> Galbraith, J.R. (1993). *Competing with Flexible Lateral Organizations*, 2nd ed. Boston, Addison Wesley Publishing Company, Figure 1.1, p. 4.

<sup>4</sup> Grove, A.S. (1996). *Only the Paranoid Survive*. New York, Currency Doubleday.

<sup>5</sup> <http://www.doblin.com/thinking/>

<sup>6</sup><http://www.gintana.com/govern/legomatrix.html>

<sup>7</sup>Deschamps, J.-P. (2008). *Innovation Leaders: How Senior Executives Stimulate, Steer and Sustain Innovation*. Chichester, Wiley/Jossey-Bass.

<sup>8</sup>Chesbrough, H.W. (2003). *Open Innovation: The New Imperative for Creating and Profiting from Technology*. Boston, Harvard Business School Press.

<sup>9</sup>Huston, L. and Sakkab, N. (2006). Connect & Develop: Inside P&G's New Model for Innovation. *Harvard Business Review* 84(3), 58–66.

