THE OBJECTIVE OF THIS chapter is to familiarize the reader with the subject of this book as well as set the expectations for how this will be discussed. The basic premise of the book is the concept that a strategy can be realized by creating business capabilities. To that extent, the role of the strategy is to establish the goals and the role of capabilities is to provide a way to realize those goals by creating competitive advantages embedded within regular business operations. This is the precept that we will follow throughout this book.

The capabilities we will be focusing on are specifically the supply chain capabilities of an organization. In recent years, the functional footprints of supply chains have grown to include most of the original value-chain functions envisaged by Michael Porter in his groundbreaking work on business strategy and the creation of competitive advantages. Therefore, the supply chain remains the key to realizing the business goals of a company. While supply chain capabilities include processes and the supply chain network, consisting of facilities for manufacturing, sourcing, stocking, and selling, the warehouse, transport equipment, and labor, it is the process capabilities that tie these resources together and create the ability to leverage these resources in the most effective manner. To that extent, the focus of our discussion implicitly remains
on the supply chain processes, even though it is assumed that the physical resources that a process would need are present as required.

Technology is heavily used in enabling the process capabilities and this dependence brings the technology strategy into the equation. We will progressively cover all these topics as we build our case for aligning the strategies.

STRATEGY

Strategic management has become a mainstay of the corporate world in the past few decades. It started as a balancing act between the external and internal forces in a corporation where the firm matched its (internal) strengths and weaknesses against the (external) opportunities and threats. Porter then provided a more detailed framework to conceive of the corporate strategy through his Five Forces (see Figure 2.2) and three fundamental strategies based on cost, differentiation, and focus. Since then, corporate strategy has evolved in many ways and researchers have enriched the basic concept in several different ways. Business strategy that leads to competitive advantages has many facets: it can be viewed through the lens of the three fundamental types of strategies as Porter suggested, as a balance between the internal and external forces, or as competitive advantage gained through resources, products, technology, and other specific organizational skills that may be difficult for the competition to imitate. As the business environment changes, firms may have to rethink strategy and realign their efforts to leverage the changes in the external business environment.

For example, consider the strategy now being adopted by the big music labels as the Web-based digital downloads become the mainstay for an industry that had traditionally relied on selling CDs through a retail distribution system. After the initial failed attempts to resist the change and throwing legal challenges to the fundamental shifts in the environment, the industry finally had to transform itself and change their strategy from a retail/distribution model to a digital download model. Along the way, they have to redefine their processes, throw away capabilities they had developed over time and create new capabilities that did not exist. Think of the distribution model for music in the 1980s and 1990s compared to the distribution model prevalent today. The physical distribution channels and all related processes of manufacturing, distribution, logistics, and store-based selling are no longer important in the new landscape. The management of inventories as the music charts changed the demand for specific artists/songs, the process for determining what to sell, what to stock and how much, and
when to start the clearance sales have ceased to be relevant in an industry that is going digital. The new distribution processes need skills that are very different from the previous ones. The new model concerns itself more with the bandwidth for downloads and electronic copyrights protection algorithms rather than worrying about safety stocks and shipping costs.

Such change is constant. While the pace of change will be different in different industries, change itself remains a constant. Since change is a constant, all corporations must continually move to adapt to such change. Those who have explicitly invested in strategy will continue to move toward their stated objectives in spite of the changes in their environment, while others may just move involuntarily in response to external and internal forces. Most large corporations have a strategy, though the extent of formal discipline applied to the strategy varies from one company to the next. Accordingly, corporate strategy in a company may either be formally structured with a lot of thought put into it or more informal. It can be well articulated or not so well expressed. It may be well accepted and appreciated or not. It is both attractive and effective, however, to have a strategy that is publicly articulated and that can be elaborated in various analyst calls to provide justification for a corporation’s actions, investments, direction, and plans.

For now, let us leave the subject of strategy here with the assumption that the basic concepts of strategic management are well understood and a well-established part of corporate management mind-set today. We will revisit the subject in detail later in the book.

STRATEGY REALIZATION THROUGH FUNCTIONAL CAPABILITIES

What comes next is the main concern of this book. To be effective, a strategy must be implemented. This means that the strategy that establishes the corporate intent, through which competitive advantage will be created, must then be expanded to articulate actions that will take the business toward its strategic goals. As shown in Figure 1.1, the whole process can be thought of as consisting of three basic steps:

1. Strategy development, that is, the process of evaluating the internal and external imperatives, analyzing the industry, products, and customers, and defining an overriding principle of how the company will try to grow. This is equivalent to defining the “what” and “why” of the problem.
2. Strategy planning is the process of assessing the current state of the corporation and evaluating various alternatives that can be potentially considered to achieve the stated imperatives of the business strategy. This step consists of analysis, evaluation, articulation, and prioritization of these alternatives, in effect defining the “how” of the problem.

3. Strategy implementation is the process of starting and managing the individual projects to implement the favored alternative from step two.

Let us refer to the combined steps 2 and 3, the process of analysis, evaluation, prioritization, articulation, and implementation of the components of strategy as the process of strategy realization. This is depicted in Figure 1.2.

Why use the term strategy realization? Strategy realization provides the broader context than is provided by a weaker term like strategy execution. It emphasizes the distinction between strategy planning and strategy execution, both of which must be addressed to successfully realize a corporate strategy.
Firms cannot jump from strategy development to strategy execution, and strategy planning must connect the two. Therefore, strategy realization is an explicit choice to denote that the realization is much more than execution.

Before any strategy can be executed, it must be analyzed to understand the answers to the following questions. What goals does it establish for the corporation? What capabilities are required to achieve these goals? Which ones of these capabilities are new? Which ones exist but must be enhanced or extended? What is the cost of developing these capabilities? What is the sustainability cost of these capabilities? What kind of competitive advantage do these capabilities create? Can this competitive advantage be sustained? How long can such an advantage be sustained? What are the constraints to such capability development? These and similar questions are what are addressed by the strategy planning step. They help the organization translate strategy into goals and required capabilities. They also help in prioritizing the development of such capabilities, thereby driving capital investment to support the strategy.

STRATEGY PLANNING: THE MISSING LINK

While most companies have some level of formally defined business strategy and an ongoing slew of projects creating new capabilities and enhancing existing ones, most do not have a formal process for the activities identified in the strategy planning step. This void is also reflected in the existing literature on corporate strategy: there are plenty of books on strategy development, a few on strategy execution, but practically none on strategy planning that connects development to execution. Strategy execution emphasizes the actual execution activities: program management, project management, change management, communication, training, and all other organizational aspects for successful execution. While that is important, the intermediate analysis provided by strategy planning is the missing link in most modern corporations in any recognizable formal fashion. In absence of this planning step, corporations fail to establish and prioritize the execution efforts that are aligned with the goals of the business strategy, and fail to identify and prioritize the filling of specific capability gaps. Throughout the book, this will become clear as we describe real-life corporate examples, analyze their strategic successes and failures, and relate them to their financial performance and goals.

Consider a corporation that wants to follow a cost leadership strategy. To realize this strategy, the corporation must develop capabilities that would establish cost leadership for its products that are similar to those offered by its
competition and provide comparable value to the consumers. The cost advantage can be derived by gaining efficiency in many functions. It may be derived from creative sourcing practices, cheaper manufacturing methods, or reduction in the cost of operations and logistics. Each one of these options will result in providing the corporation with some amount of cost leadership. Each one of these options will also require a definite amount of capital to develop, adopt, and maintain that capability. These options will result into changes: organizational, process, and cultural, that must be managed for successful adoption. Finally, each of these options will provide a strategic advantage with a limited amount of sustainability as other companies race to develop similar capabilities and the advantage is lost. These are the questions that are answered in the strategy planning step. It helps to define these options, analyze them, evaluate their costs and sustainability, and help the corporation eliminate options that are not right for them. The analysis must also identify any process, technology, and organizational constraints that must be addressed for successfully developing the selected capabilities for cost leadership. If the firm decides to derive the cost advantage through investing in new manufacturing technology, then it will need to evaluate and decide, in addition to the capital costs, whether it has trained personnel who are ready to execute the new technology, whether the new technology will impact any downstream or upstream processes, how this will affect their throughput and efficiency, depreciation, operating cash flow, and so on. Any gaps that this analysis may reveal must be addressed or they may threaten successful execution and negatively affect the overall results further on in the execution cycle.

Therefore, developing the right set of capabilities is the primary key to strategy realization, as shown in Figure 1.3. Strategy planning helps in

![FIGURE 1.3 A Strategy Requires Capabilities]
identifying and prioritizing these capabilities before strategy execution can take over the implementation of individual programs and projects to make them a reality. These capabilities create or enhance functional competencies in a corporation. *Functional competencies are a set of related business processes that are unique to the corporation in providing a specific capability and hence creating the competitive advantage.* Wal-Mart’s capabilities in inventory management and distribution are examples of such functional competencies. While the individual pieces of inventory management at Wal-Mart may be standardized (such as using a predetermined ordering level with continuous inventory review), their integration with other Wal-Mart processes provides the related set of business processes creating a unique functional competency that creates the competitive advantage. As long as other firms are unable to replicate similar process integration, Wal-Mart will have a sustained advantage through this capability. Figure 1.4 shows this relationship, in which the strategy requires capabilities that are created through building functional competencies, which is a set of related business processes *unique* to a corporation.

To create long-term sustainable competitive advantage, firms must evaluate their functional competencies to decide where the best opportunities exist that are aligned with their functional strengths and will allow the firm to realize their strategy. We will call this the firm’s functional strategy. The functional strategy is derived from the business strategy by analyzing the capabilities that must be created to realize the business strategy. Functional strategy is aligned with and supports the business strategy. Functional strategy provides the first step toward strategy realization by establishing and prioritizing the capabilities that must be created.

**FIGURE 1.4** Capabilities Required by a Business Strategy
TECHNOLOGY AS THE ENABLER

Now, let us turn our attention to how these capabilities are created and supported in the modern context. Let us review our definition of capabilities: they are functional competencies that are sets of related business processes (remember the implicit focus on process capabilities and the assumption that physical resources required by these processes will be created and made available as part of creating the process capability). This brings the current discussion to technology because technology is the main support for all business processes across modern corporations. Technology has become the all-pervasive, omnipresent, underlying foundation that creates, supports, and constrains the business processes in all major corporations. Technology, therefore, can be the beneficent enabler for the business to create competitive advantage or the wretched constraint that becomes an anchor stuck in the sands of time to prevent progress. Since technology provides the foundation for all business processes and enables or constrains the creation of new capabilities, this is the next logical step in strategy planning and realization. This concept is shown in Figure 1.5, which extends the concept presented in Figure 1.4 by adding technology as the enabler of the business processes.

While Porter and others grouped technology in the secondary or supporting activities for a corporation, the technology has finally moved to the forefront and must be looked at as one of the primary capabilities for any firm. Today, it is almost inconceivable to think of a firm existing without some amount of technology supporting its processes, which, in turn, create and support the capabilities of the firm. Therefore, the ability to manage technology has moved from a

![Figure 1.5 Diagram](image-url)
A well-thought-out technology strategy can go a long way in providing the flexibility that a business will inevitably need. Technology involves substantial capital investments to procure, install, and maintain, and therefore must become part of the strategic planning process to provide a long-term foundation that supports the current operations and does not hinder the evolution of a business strategy as the environment changes and the firm adapts. In fact, there is no dearth of examples to show where absence of technology strategy has resulted in substantial loss of corporate performance, as well as examples

former, secondary position to primary prominence, and firms that are unable or unwilling to see this shift will perish.

A great example of this appears in the study of Kmart versus Wal-Mart. While Kmart held a position of advantage in the early 1980s, Wal-Mart quickly overtook it in only a decade by developing superior supply chain capabilities enabled by technology. While Wal-Mart’s supply chain capabilities have received wide recognition, the fact remains that Wal-Mart could not have been successful if it had not also developed a significant capability to leverage technology at the same time. It is unthinkable that a company the size of Wal-Mart (in 1991 when Wal-Mart’s revenues surpassed Kmart’s, it reported over $30 billion in sales; it now has revenues over $400 billion) would have been successful in creating key supply chain capabilities without technology. It is also unthinkable that Kmart, which was comparable to Wal-Mart in sales (and larger in fact, by store count) did not have the capital to invest in similar efforts. In fact, in the early 1990s, Wal-Mart and Kmart were both credited with having the “most sophisticated distribution systems among all of the retailers in the world.” Both followed a “low price” strategy coupled with large discount stores and sophisticated distribution systems. However, Kmart was unable to manage technology to consistently align its capabilities with its strategies for growth and survival. Kmart tried to grow through acquisitions but never developed the capability to successfully leverage technology to integrate and operate these acquired assets profitably. In contrast, Wal-Mart primarily grew organically (with some exceptions, such as Philips Food Centers, MacLane Company, and The Wholesale Club) and consistently improved its supply chain capabilities through investments in technology. The expanded example is provided at the end of Chapter 7.
where technology strategy has provided the foundation for building and maintaining competitive advantage.

We will refer to this alternately as the deployment strategy throughout this book. Deployment strategy provides a larger context for the deployment of technology as well as the deployment of business processes enabled by such technology. Deployment strategy must also be aligned with the business and functional strategies of the firm and must support both. Since a lack of proper technology can constrain the business capabilities that can be effectively deployed, therefore, the deployment strategy constrains the scope of such capabilities for the realization of business strategy.

CREATING COMPETITIVE ADVANTAGE THROUGH FUNCTIONAL CAPABILITIES

The focus of this book is to evaluate how the functional capabilities create competitive advantage and why it is imperative that the firms understand the correlation among the business, functional, and deployment strategies to achieve sustained competitive advantage. A 1995 article in Harvard Business Review on corporate strategy talked about a resource-based view (RBV) of the firm. In this view, companies are seen as “different collections of physical and intangible assets and capabilities.” The authors further argue that “competitive advantage ultimately can be attributed to the ownership of a valuable resource that enables the company to perform activities better.” The “valuable resource” in this definition is a tangible or intangible resource or a capability. In contrast, the argument that we are going to follow is that capabilities are the core driver for creating and maintaining the competitive advantages while the tangible or intangible assets are merely the by-products of such capabilities. For example, owning proven oil fields can be a big tangible asset for an oil company, however, unless they also possess the capability to harness the fields (technology, processes, capital, and labor), those oil fields (the tangible asset) by themselves are only an advantage in theory. Conversely, creating an effective process capability can sometimes result in tangible assets. A successfully created capability to reduce inventories may result in free operating cash flow that can then be used for any other purpose, such as to acquire a tangible asset in the form of a warehouse or store. Similarly, the capability to have perfect order fulfillment may enhance a corporation’s reputation for being customer-centric, which then becomes an intangible strategic asset that can be leveraged in a differentiation strategy.
Creating Competitive Advantage through Functional Capabilities

Therefore, while this RBV view is somewhat aligned with the capability view presented here, the authors fail to emphasize the strong connection between the corporate strategy and functional capabilities that becomes the core driver for the firms to realize their strategy.

While capabilities to gain competitive advantage can be developed in diverse business functions, our primary focus will be the supply chain capabilities and the competitive advantages that can be created through such capabilities. The examples provided throughout this book will use the supply chain as the key functional area to create competitive capabilities. Supply chain process capabilities primarily help in reducing costs or increasing the efficiency of capital used, while simultaneously supporting operational flexibility and agility, all of which can be directly leveraged to support most basic business strategies based on price leadership, differentiation, or focus.

Reducing costs as a strategy has become a primary strategy for many businesses in recent years. There are several reasons for this, but the most important reason is that the increasing globalization results in more and more commoditization of products that deteriorate the brand premiums and indirectly deal a blow to product differentiation as a strategy. The face of this commoditization in America is Wal-Mart and its assortment of cheap functional products that address the utilitarian functions without the brand premium. But this process is not limited to America: it is widespread across the globe, with the growth of the middle class in China and India and their aspirations to match the lifestyles of developed countries at a fraction of the cost. Both of these phenomena, that of Wal-Mart driving down costs to expand its market share and of developing countries providing new markets for cheaper utilitarian products, have propelled cost as a strategy to the forefront of the three fundamental strategies suggested by Porter. If cost is the core strategy of choice, then supply chain becomes the core business function that can help corporations realize that strategy. Examples of creating and maintaining competitive advantage through supply chain capabilities abound, with Wal-Mart being the most obvious and visible. However, these supply chain capabilities must be aligned with the strategic goals of the corporation to successfully create the competitive advantages that the corporation seeks.

When companies pursue differentiation or focus as their primary strategies, the focus of the corporate supply chain capabilities must be to produce process agility and flexibility, rather than reducing the cost of operations. Customer-focused capabilities such as having the visibility of inventory across the chain and the ability to accurately predict the status of orders and delivery can lead to create the differentiation that is sought by
businesses. Product-focused capabilities can provide similar differentiation through the ability to personalize individual orders or products based on customer preferences. Companies like Nike and Land Rover have successfully developed supply chain capabilities to support their differentiating strategies that allow customers to personalize their products, with accurate projections of when those products will be manufactured and delivered. This requires that their supply chains must have visibility into inventory and labor across the entire supply chain, to be able to promise the final delivery of product personalized to their customer’s tastes.

Finally, no strategy can guarantee a sustained competitive advantage unless it evolves, reacts, predicts, and even preempts the changes in the environment. Such evolution will almost always result in the changes required in the capabilities developed. As most such capabilities are closely tied to the business processes and depend on technology, the ability to develop these capabilities to support the evolving and shifting strategic push requires that firms develop equally agile functional and technology strategies that not only allows the initial creation of these capabilities, but continuously support their evolution, as well.

THE ALIGNMENT OF BUSINESS, FUNCTIONAL, AND TECHNOLOGY STRATEGIES

So far, we have established the outlines of the three strategies—business, functional, and technology—and a general idea of why they should be aligned. The objective of this book is to describe a clear line of dependence among these three strategies, their relationships with one another, and therefore their ability to affect and support each other.

Business strategies tend to be generic and we will review the three basic strategies suggested by Porter as well as some other concepts, such as the resource- and capability-based views of competitive strategies. In an enterprise, adopting any of these strategies requires many diverse initiatives that are spread across a wide spectrum of business functions. All these initiatives together are designed to support the goals of the strategy. For example, a customer differentiation strategy may trigger several developments in various business functions: enhancing the ability to fulfill orders faster by reducing lead time, providing inventory visibility, increasing perfect order fulfillment rates, providing customization opportunities, self-service for tracking order status, setting up help lines, investing in training associates, providing help in using the product, creating customer credit options, and so on. While the initiatives in the examples are not
exhaustive by any means, they already cover several business functions within the enterprise: supply chain, merchandising, customer service, and finance. This is quite true for almost any strategy at the enterprise level due to their generic nature and higher-level goals. While this book uses such examples to demonstrate how these different functions support the basic business strategies, we will continue to use supply chain examples when discussing details and in order to explain the underlying concepts and relationships between the business strategy and functional strategy.

The functional strategy section of the book will explain the general foundation of the concept of functional strategies and establish how these strategies help define the process capabilities required to support the business goals. We will then use the discussion to develop and define supply chain strategies and establish the relationship between the supply chain strategies and the three basic business strategies based on cost, product differentiation, and customer focus. We will see how successful corporations ensure that these strategies are aligned and leverage the synergies produced through such an alignment, as well as how they have created competitive advantage and sustained such advantage in the face of inevitable changes in the environment. Finally, we discuss how your company can do the same by following a formal process to align and realign these strategies as the marketplace changes and new realities emerge.

The discussion on technology strategy is designed to be open and equally applicable to all functional strategies, although we will continue to derive our examples from the supply chain functions to further build and support the functional focus.

Aligning the three strategies is the shortest, fastest, and least expensive way for a firm to achieve its desired competitive position. It prevents waste and experimentation, forces analysis and thoughtful decision-making, creates awareness of the firm’s needs, and provides an objective criterion to make capital investments. Achieving such an alignment is equivalent to “achieving lean” in the strategy process itself, from development through planning to execution.