

integrated silo applications. But then he noted, "It's a miracle they work." Eventually this company's lack of a foundation for execution made it a juicy takeover target. Today these systems are being replaced with those of the acquiring company.

Few companies are comfortable with a dependency on miracles. They want technology to reliably support existing processes. What's more, they'd like their existing technology to enable future capabilities. These companies need to take a different approach to implementing IT-enabled business processes.

### How Do You Build a Foundation for Execution?

The foundation for execution results from carefully selecting which processes and IT systems to standardize and integrate. Just as humans must learn how to ride a bicycle (and think hard about what they are doing while they are learning), the processes built into a foundation for execution require a great deal of concentration—for a while. Eventually routine business activities—just like bicycle riding—become automatic. Outcomes become predictable. The foundation for execution takes on another layer. A company's identity becomes clearer, and executives can focus their attention on the future.

To build an effective foundation for execution, companies must master three key disciplines:

1. *Operating model.* The *operating model* is the necessary level of business process integration and standardization for delivering goods and services to customers. Different companies have different levels of process integration across their business units (i.e., the extent to which business units share data). Integration enables end-to-end processing and a single face to the customer, but it forces a common understanding of data across diverse business units. Thus, companies need to make overt decisions about the

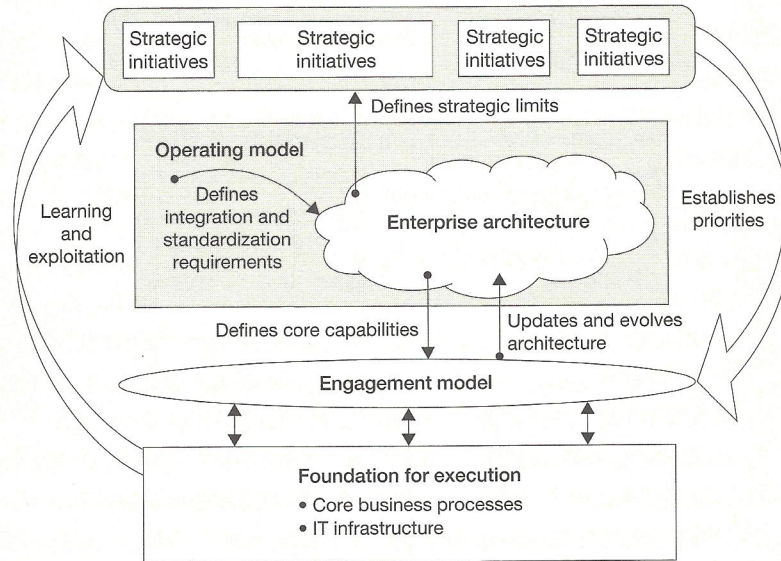
importance of process integration. Management also must decide on the appropriate level of business process standardization (i.e., the extent to which business units will perform the same processes the same way). Process standardization creates efficiencies across business units but limits opportunities to customize services. The operating model involves a commitment to how the company will operate.

2. *Enterprise architecture.* The *enterprise architecture* is the organizing logic for business processes and IT infrastructure, reflecting the integration and standardization requirements of the company's operating model. The enterprise architecture provides a long-term view of a company's processes, systems, and technologies so that individual projects can build capabilities—not just fulfill immediate needs. Companies go through four stages in learning how to take an enterprise architecture approach to designing business processes: Business Silos, Standardized Technology, Optimized Core, and Business Modularity. As a company advances through the stages, its foundation for execution takes on increased strategic importance.
3. *IT engagement model.* The *IT engagement model* is the system of governance mechanisms that ensure business and IT projects achieve both local and companywide objectives. The IT engagement model influences project decisions so that individual solutions are guided by the enterprise architecture. The engagement model provides for alignment between the IT and business objectives of projects, and coordinates the IT and business process decisions made at multiple organizational levels (e.g., companywide, business unit, project). To do so, the model establishes linkages between senior-level IT decisions, such as project prioritization and companywide process design, and project-level implementation decisions.



FIGURE 1-2

### Creating and exploiting the foundation for execution



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Figure 1-2 illustrates how companies apply these three disciplines to create and exploit their foundation for execution. Based on the vision of how the company will operate (the operating model), business and IT leaders define key architectural requirements of the foundation for execution (the enterprise architecture). Then, as business leaders identify business initiatives, the IT engagement model specifies how each project benefits from, and contributes to, the foundation for execution.

### Why Is a Foundation for Execution Important?

Our research found that companies with a solid foundation had higher profitability, faster time to market, and lower IT costs. These outcomes are universally beneficial and timeless—they were valu-

able twenty years from now. But the that highlight the execution. Companies serious risks that v

### Growing Complex Can Fossilize Op

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able twenty years ago and will be just as valuable twenty years from now. But there are a number of more-recent developments that highlight the increasing importance of a foundation for execution. Companies without a solid foundation face a number of serious risks that weren't present just ten years ago.

### *Growing Complexity in Companies' Systems Can Fossilize Operations*

As with the investment bank whose systems were so complex that it was a miracle they worked, legacy systems cobbled together to respond to each new business initiative create rigidity and excessive costs. The Internet boom exposed the inflexibility of many companies' technology and process environments, which led to an inability to adapt to new channels. This inflexibility was not the result of a digitized foundation for execution. It was the result of systems so complex that any change required individually rewiring systems to all the other systems they connect to. Developing and testing new capabilities in such a complex environment is time consuming, and every change becomes a risky, expensive adventure.

The complexity has not added value. Most managers can list processes they perform in many different ways in multiple parts of the company and support with many different systems. As more competitors aggressively pursue reuse of standard processes and systems across their product lines, services, or business units, the inefficiencies of non-value-added variations create strategic disadvantages. The CIO at a \$5 billion manufacturing company reported that a global implementation of three modules of a large, packaged enterprise resource planning system (make to ship, account to report, and order to cash) eliminated 450 applications and 3,150 interfaces, mostly by eliminating redundancy. Implementing standardized, digitized processes carries costs, particularly those associated with organizational change, but the benefits are simpler technology environments, lower-cost operations, and greater agility.<sup>8</sup>



and strategic agility (29%) than companies that had not developed a foundation for execution.<sup>3</sup>

In this chapter we will first define the dimensions of the operating model—standardization and integration—and then describe the four types of operating models: Diversification, Coordination, Unification, and Replication. We will describe the critical components of each model and show how an operating model shapes future strategic choices. We will then discuss important considerations in choosing an operating model.

### **Integration and Standardization: Key Dimensions of an Operating Model**

An operating model has two dimensions: business process standardization and integration. Although we often think of standardization and integration as two sides of the same coin, they impose different demands. Executives need to recognize standardization and integration as two separate decisions.

*Standardization* of business processes and related systems means defining exactly how a process will be executed regardless of who is performing the process or where it is completed. Process standardization delivers efficiency and predictability across the company. For example, using a standard process for selling products or buying supplies allows the activities of different business units to be measured, compared, and improved. The result of standardization—a reduction in variability—can be dramatic increases in throughput and efficiency.

Yet greater standardization has a cost. In exchange for increased predictability, standardized processes necessarily limit local innovation. And the transition to standardization usually requires that perfectly good (and occasionally superior) systems and processes be ripped out and replaced by the new standard. This can be politically difficult and expensive.

*Integration* links the efforts of organizational units through shared data. This sharing of data can be between processes to

enable end-to-end transaction processing, or across processes to allow the company to present a single face to customers. For example, an automobile manufacturer may decide to integrate processes so that when a sale is recorded, the car is reserved from among the cars currently in production. By seamlessly sharing data between the order management and manufacturing scheduling processes, the company improves its internal integration and, consequently, its customer service. In financial services, sharing data across processes enables a loan officer to review a customer's checking, savings, and brokerage accounts with the bank, providing better information about the customer's financial situation and enabling better risk assessments for loans.

The benefits of integration include increased efficiency, coordination, transparency, and agility. An integrated set of business processes can improve customer service, provide management with better information to make decisions, and allow changes in one part of the business to alert other parts of actions they need to take. Integration can also speed up the overall flow of information and transactions through a company.

The biggest challenge of integration is usually around data. End-to-end integration requires companies to develop standard definitions and formats for data that will be shared across business units or functions. For business units to share customer information, they must agree on its format. Similarly, they must share a common definition for terms like *sale*, which can be said to occur when a contract is signed, when money is paid, or when product is delivered. These can be difficult, time-consuming decisions.

### Four Types of Operating Models

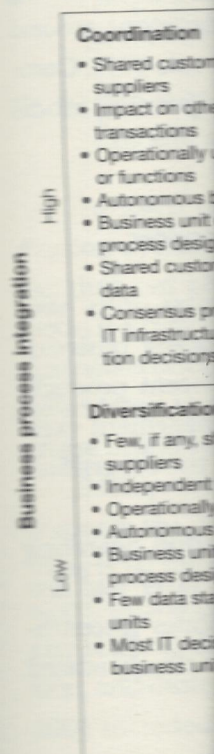
We have developed a straightforward two-dimensional model with four quadrants, representing different combinations of the levels of business process integration and standardization (figure 2-1). Every company should position itself in one of these quadrants to clarify how it intends to deliver goods and services to customers.

The four gener

1. Diversification
2. Coordination
3. Replication
4. Unification

FIGURE 2-1

Characteristics of





The four general types of operating models are:

1. Diversification (low standardization, low integration)
2. Coordination (low standardization, high integration)
3. Replication (high standardization, low integration)
4. Unification (high standardization, high integration)

FIGURE 2-1

**Characteristics of four operating models**

Business process integration	High	<p><b>Coordination</b></p> <ul style="list-style-type: none"> <li>• Shared customers, products, or suppliers</li> <li>• Impact on other business unit transactions</li> <li>• Operationally unique business units or functions</li> <li>• Autonomous business management</li> <li>• Business unit control over business process design</li> <li>• Shared customer/supplier/product data</li> <li>• Consensus processes for designing IT infrastructure services; IT application decisions made in business units</li> </ul>	<p><b>Unification</b></p> <ul style="list-style-type: none"> <li>• Customers and suppliers may be local or global</li> <li>• Globally integrated business processes often with support of enterprise systems</li> <li>• Business units with similar or overlapping operations</li> <li>• Centralized management often applying functional/process/business unit matrices</li> <li>• High-level process owners design standardized processes</li> <li>• Centrally mandated databases</li> <li>• IT decisions made centrally</li> </ul>
	Low	<p><b>Diversification</b></p> <ul style="list-style-type: none"> <li>• Few, if any, shared customers or suppliers</li> <li>• Independent transactions</li> <li>• Operationally unique business units</li> <li>• Autonomous business management</li> <li>• Business unit control over business process design</li> <li>• Few data standards across business units</li> <li>• Most IT decisions made within business units</li> </ul>	<p><b>Replication</b></p> <ul style="list-style-type: none"> <li>• Few, if any, shared customers</li> <li>• Independent transactions aggregated at a high level</li> <li>• Operationally similar business units</li> <li>• Autonomous business unit leaders with limited discretion over processes</li> <li>• Centralized (or federal) control over business process design</li> <li>• Standardized data definitions but data locally owned with some aggregation at corporate</li> <li>• Centrally mandated IT services</li> </ul>
		Low	High

**Business process standardization**

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