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FORGET STRATEGY: FOCUS IT ON YOUR OPERATING MODEL

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Most companies try to maximize value from IT investments by aligning IT and IT-enabled business processes with business strategy. But business strategy is multi-faceted, encompassing decisions as to which markets to compete in, how to position the company in each market, and which capabilities to develop and leverage. In addition, strategic priorities can shift as companies respond to competitor initiatives or seize new opportunities. As a result, strategy rarely offers sufficiently clear direction for development of stable IT and business process capabilities. IT is left to align with individual strategic initiatives—after they are announced. Thus, IT becomes a persistent bottleneck.

To make IT a proactive—rather than reactive—force in creating business value, companies should define an operating model. An operating model is the necessary level of business process integration and standardization for delivering goods and services to customers. By identifying integration and standardization requirements an operating model defines critical IT and business process capabilities. This briefing explores how a company's operating model guides IT investment and enhances business agility.¹

Four Alternative Operating Models

Companies make two important choices in the design of their operations: (1) how standardized their business processes should be across operational units (business units, region, function, market segment) and (2) how integrated their business processes should be across those units. In making these two choices, company management is targeting one of four operating models (as shown in Figure 1):

¹ This briefing expands on concepts originally described in "Aligning IT Architecture with Organizational Realities," CISR Research Briefing Vol. III, No. 1A, March 2003.

- Diversification (low standardization, low integration)
- Unification (high standardization, high integration)
- Coordination (low standardization, high integration)
- Replication (high standardization, low integration)

All four operating models represent viable alternatives for delivering goods and services to a company's customers.

The *Diversification* model is a decentralized organizational design. Business units pursue different markets with different products and services, and benefit from local autonomy in deciding how to address customer demands. Carlson, a \$20B company of related but autonomous hospitality businesses, is an example of a Diversification model.

The *Unification* model describes a centralized organizational design. The company pursues the need for reliability, predictability and low cost by standardizing business processes and sharing data across business units to create an end-to-end view of operations and a single face to the customer. Delta Air Lines' standardized global business is an example of Unification.

The *Coordination* model focuses on integration. A Coordination model company creates a single face to its customers or a transparent supply chain without forcing specific process standards on its operating units. Toyota Europe, for example, shares product data across country business units so they can rapidly exchange automobiles and parts to meet customer needs.

The *Replication* model focuses on process standardization. Operating units perform tasks the same way using the same systems so that they can generate global efficiencies and brand recognition. However, operating units rarely interact. As an example, Marriott replicates systems and processes related to a wide range of processes, including reservations, frequent guest rewards, wake-up calls and revenue planning in each of its independently managed hotels.

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Implications for IT Investment

By identifying the intended level of business process integration and standardization, the operating model determines priorities for development of digital capabilities and thus IT investment. Accordingly, IT investments not only address immediate business needs, they digitize key business capabilities, thereby building a foundation for future business initiatives.

For example, CEMEX, a Replication company, has built a foundation based on process standardization. CEMEX has standardized eight key business processes: commercial (customer facing and cement logistics), ready mix manufacturing, accounting, planning and budgeting, operations, procurement, finance, and HR. Although the businesses reuse processes, they do not typically share data—each business is run autonomously. CEMEX has leveraged its IT-enabled standardized processes in assimilating acquisitions. For example, in 2000, CEMEX acquired Southland, the U.S.'s second largest cement manufacturer, and completed assimilation in four months. Subsequent acquisitions have been assimilated in as little as two months.²

While CEMEX has built standardized processes, Merrill Lynch's Global Private Client (GPC) business has built a foundation of digitized processes to support a Coordination model. GPC's business objective is to provide a wide range of investment products to wealthy clients across a variety of channels (e.g. interactions with a financial advisor, online access, telephone access).3 To meet this objective, GPC developed integrated product data and standardized customer interfaces on its Total MerrillSM platform. But GPC does not typically standardize business processes across the globe. GPC leverages these IT capabilities every time it introduces a new investment product or creates a new channel for accessing its products. As a result of GPC's standard technology platform and access to shared business data, the company has the best revenue per advisor, earnings per advisor and assets per advisor in the industry.⁴

As a Unification company, Dow Chemical seeks both integration and standardization to achieve effi-

² Rebecca Chung, Donald Marchand and William Kettinger, "The CEMEX Way: The right balance between local business flexibility and global standardization," IMD – International Institute for Management 2005. IMD-3-1341.

ciencies and meet the demands of global customers. Dow uses a single instance of SAP to support highly standardized core processes (e.g., manufacturing, finance, logistics) while creating a global supply chain. Dow has leveraged these capabilities to grow profitably both organically and through acquisitions. From 1994 to 2004, despite a downturn in the market, Dow nearly doubled its revenues while growing its employee base less than 10%—a productivity improvement of eight percent per year.⁵

By purposely not creating shared digital capabilities, the Diversification model encourages organic growth of individual business units and poses unlimited opportunities for growth through acquisition. But because Diversification leverages fewer capabilities than the other models, companies need to find synergies to create shareholder value. Some Diversification companies are introducing shared services to gain economies of scale; others are diversifying into closely related businesses to feed a core business. For example, with its package delivery business at its core (a Unification model), UPS has diversified into a set of smaller, growth oriented businesses such as UPS Supply Chain Solutions, UPS Capital Corporation, UPS Consulting, The UPS Store, and UPS Professional Services. These new businesses cannot reuse the existing IT and business process foundation because they operate differently, but they have become profitable in their own right while adding value by feeding the core business. As a result, UPS has continued to grow while boasting an operating margin nearly three times the industry average.

Choosing an Operating Model

Although most companies can identify processes fitting every operating model, they need to select a single operating model to guide management thinking and system implementations. Management can then organize business unit and IT responsibilities based on principles about how the company will operate most of the time. One way companies respond to conflicting demands is to adopt different operating models at different organizational levels.

For example, Johnson & Johnson has long operated in the Diversification quadrant.⁶ But J&J's U.S.

³ V. Kastori Rangan and Marie Bell, "Merrill Lynch: Integrated Choice," Harvard Business School case 9-500-090, March 2001.

⁴ Merrill Lynch 2004 Annual Report.

⁵ Jeanne W. Ross and Cynthia M. Beath, *The Federated Broker Model at The Dow Chemical Company: Blending World Class Internal and External Capabilities*, MIT Sloan CISR Working Paper No. 355, July 2005.

⁶ See Jeanne W. Ross, *Johnson & Johnson: Building an Infrastructure to Support Global Operations*, MIT Sloan CISR Working Paper No. 283, September 1995.

pharmaceutical group applies a Coordination model to present a single face to health care professionals. In Europe, Janssen Pharmaceutical Products applies a Replication model providing low-cost, standar-dized processes for drug marketing, delivery and monitoring. Targeting different operating models at different organizational levels allows J&J to meet the multiple objectives of a large, complex company, while keeping organizational design reasonably simple at the individual operating company level.

Our research has found a strong preference across companies and industries for the Unification model. Data collected at 103 companies in 2004 indicated that 63% of companies were targeting Unification. Only nine percent were targeting Diversification; 17% were targeting Coordination; and 11% were targeting Replication operating models. The appeal of the Unification model is that it provides a thick foundation of digital capabilities to leverage in future business initiatives. However, implementing that foundation requires a great deal of time, money and management focus.

In contrast, the off-diagonal operating models (Coordination and Replication) require less time for building capabilities before companies can start reusing them. These off-diagonal models abandon the centralization-decentralization tradeoffs by allocating different decision rights to the center and the business units. In a Replication model, local managers must accept enterprise-wide process standards,

but they have the autonomy to manage customer relationships locally. In a Coordination model, local managers accept enterprise-wide data standards and customer interfaces, but they have the autonomy to develop products and processes to achieve local business objectives. Companies should recognize that each operating model creates opportunities—but also creates limitations.

Making a Commitment

The operating model concept requires that management put a stake in the ground and declare which business processes will distinguish a company from its competitors. A poor choice of operating model—one that is not viable in a given market—will have dire consequences. But not choosing an operating model is just as risky. Without a clear operating model, management careens from one market opportunity to the next, not leveraging reusable capabilities.

In adopting an operating model a company benefits from a paradox: standardization leads to flexibility. By building a foundation of standardized technology, data and/or processes, our research shows a company achieves more business agility and responds to new market opportunities faster than its competitors. Admittedly, most companies will need to regularly experiment with initiatives that do not leverage their foundation. But an operating model provides needed direction for building a reusable foundation for business execution. IT becomes an asset instead of a bottleneck.

Figure 1: Characteristics of Four Operating Models

Business Process Integration	High	Coordination Shared customers, products or suppliers Impact on other business unit transactions Operationally unique business units or functions Autonomous business management Business unit control over business process design Shared customer/supplier/product data Consensus processes for designing IT infrastructure services; IT application decisions are made in business units	Unification Customers and suppliers may be local or global Globally integrated business processes often with support of enterprise systems Business units with similar or overlapping operations Centralized management often applying functional/process/business unit matrices High-level process owners design standardized process Centrally mandated databases IT decisions made centrally
	Low	Diversification Few, if any, shared customers or suppliers Independent transactions Operationally unique business units Autonomous business management Business unit control over business process design Few data standards across business units Most IT decisions made within business units.	Replication Few, if any, shared customers Independent transactions aggregated at a high level Operationally similar business units Autonomous business unit leaders with limited discretion over processes Centralized (or federal) control over business process design Standardized data definitions but data locally owned with some aggregation at corporate Centrally mandated IT services
		Low	High

Business Process Standardization

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In July of 2008, Jeanne W. Ross succeeded Peter Weill as the director of CISR. Peter Weill became chairman of CISR, with a focus on globalizing MIT CISR research and delivery. Drs. George Westerman, Stephanie L. Woerner, and Anne Quaadgras are full time CISR research scientists. MIT CISR is co-located with MIT Sloan's Center for Digital Business and Center for Collective Intelligence to facilitate collaboration between faculty and researchers.

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