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Component business models

Making
specialization
real

Strategy
and Change



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Component business models

Making specialization real

Open communication standards and plummeting transaction costs have ushered in the era of specialization. Industry dynamics are changing substantially, presenting firms with new opportunities to create or destroy value. No matter how large, individual firms can no longer expect to control end-to-end industry value chains. Instead, they must specialize in areas where they command an absolute advantage in the marketplace. Easily said. But putting specialization into practice with the right operating model requires executives to think differently, not only about the construct of the company but also about the interrelationships of the assets they rely on to provide value to the marketplace.

Component business models offer a proven approach to driving a specialized focus, both internally and externally. Internally, components help firms rethink the leverage they can achieve with the assets and capabilities they own. Externally, components help firms source specialized capabilities that they cannot feasibly create themselves. Combining these types of specialization allows firms to redefine their competitive positions in the face of the sweeping changes in their industries, while simultaneously achieving the competing benefits of scale, flexibility and efficiency.

Competing in the era of specialization

During the last decade, businesses across the globe struggled to comprehend and adapt to the changes brought on by the ubiquitous growth of information technology and the Internet. Today, those uncertainties are no longer so uncertain; the tech-driven upheavals of the 1990s and early 2000s have coalesced into a new, era-defining set of imperatives.

Widespread adoption of standard communication technologies (such as the Web, e-mail and instant messaging) and enterprise software packages (most notably in the areas of customer relationship management

and enterprise resource planning) have given firms many of the same channel capabilities as well as a similar outlook on their organizations. At the same time, open data standards like XML have made it possible to automate transactions, driving a dramatic increase in flexibility and a “race to the bottom” in transaction costs.

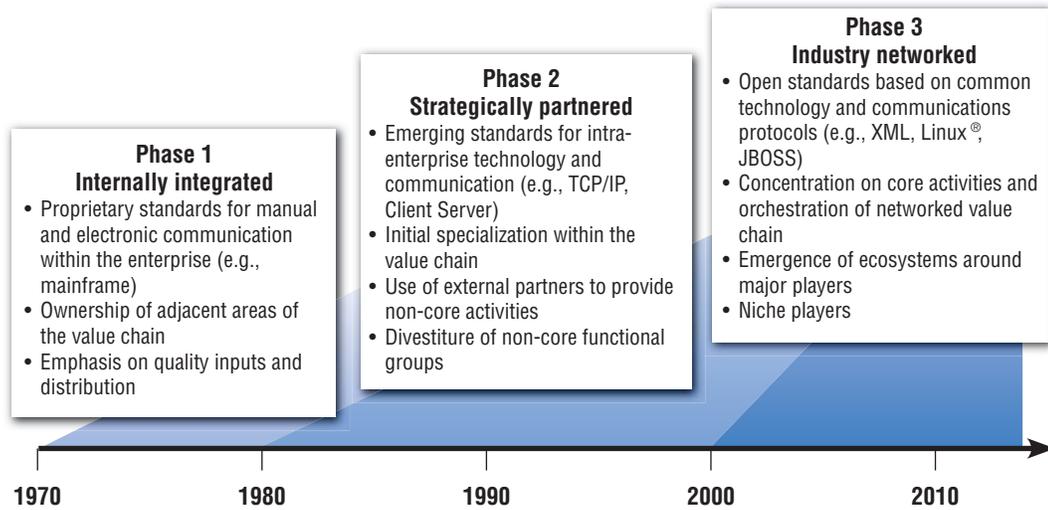
The convergence of these forces has formed what is, in effect, a global connectivity platform. The almost universal ability to plug into this platform has removed many traditional barriers to entry. As new entrants flood the marketplace, customers are finding it easier than ever to switch providers, creating an unprecedented opportunity for firms to create value – or lose out to competitors who do.

In this environment, only specialization – a laser-like focus on the few activities that confer real advantage and profit – will enable firms to deliver full value to their key stakeholder groups of customers, employees and shareholders. As the implications of the global connectivity platform ripple out through the marketplace, firms face a fundamental need for specialization on two parallel tracks: external and internal.

External specialization

As Figure 1 shows, the steady advance of information technology, culminating in the recent emergence of the global connectivity platform, has had a profound impact on the evolution of business designs. In past decades, firms pursued “internal integration” – silos linked by proprietary processes – in an attempt to drive quality, reduce risk and manage availability by controlling the value chain from end to end. Later, during the 1990s, as technology began to enable more sophisticated links, savvy firms began selectively forming strategic partnerships with specialized providers along the value chain.

Figure 1. The three phases of external specialization.



Source: IBM Institute for Business Value.

Many firms are in this “strategically partnered” phase today, and for good reason. Working with specialists confers many benefits. With their inherent scale advantages, specialists allow the firms that partner with them to boost the margins of products and services. And specialists often bring access to new markets and sales channels to the deal, making partnerships a good way for firms to grow revenue through nontraditional sales channels and to boost growth opportunities.

But there is also a downside. For firms held together with proprietary architectures and technologies, ad hoc retooling to support strategic partnerships requires heavy investment in capital and management time. And often, the links they establish with partners are also proprietary, so as the number of partners grows, contracting and coordination costs tend to creep upward, while strategic responsiveness declines. So even with strategic partnerships, the inefficiencies and impediments of proprietary integration can leave firms vulnerable to upstart peers designed from the bottom up to take full advantage of the global connectivity platform.

To avoid being outclassed by these focused, nimble peers, smart firms are pushing through to the ultimate phase of external specialization – the “industry networked” phase. In this phase, firms focus on their specific areas of expertise and begin to play as part of coordinated industry “ecosystems,” or flexible networks driven by collaboration, universal connectivity and standardized contracting (based on XML and other technologies that automate the exchange of information between applications).

Apple Computer’s iPod phenomenon provides one example of how these industry networks can transform businesses – and even create fundamentally new markets – by providing companies with access to a wide range of specialized capabilities. By collaborating with external specialists, Apple was able to take existing, off-the-shelf technologies – such as portable hard drives, liquid crystal displays and rechargeable batteries – add Apple styling and design savvy and sell the new product as part of an integrated music download service.¹ In a few short months, external specialization allowed Apple to combine aspects of consumer electronics, media and information technology to create something truly new. In the process,

it showed how external specialization can radically change the ecosystems of entire industries. Today, a wide array of niche companies supply iPod users with ear buds, carrying cases, speakers, remote controls and attachments for recording voices and transmitting music over radio frequencies.

External specialization also affects the networks and channels through which enterprises coordinate, interact and communicate. As standardization reduces coordination costs and transaction hassles, these networks and channels tend to expand, creating new revenue opportunities as enterprises come together in a specialized economy to provide a complete value proposition. Apple had to collaborate with record labels and content owners to make iTunes, the iPod's service component, a reality. The company even had to cooperate with competitors like Microsoft® to support software and music downloads. This sort of collaboration of entire industry value chains is a typical aspect of specialization. The stellar success of the iPod has shown that achieving such "network effects" can be well worth the risk.

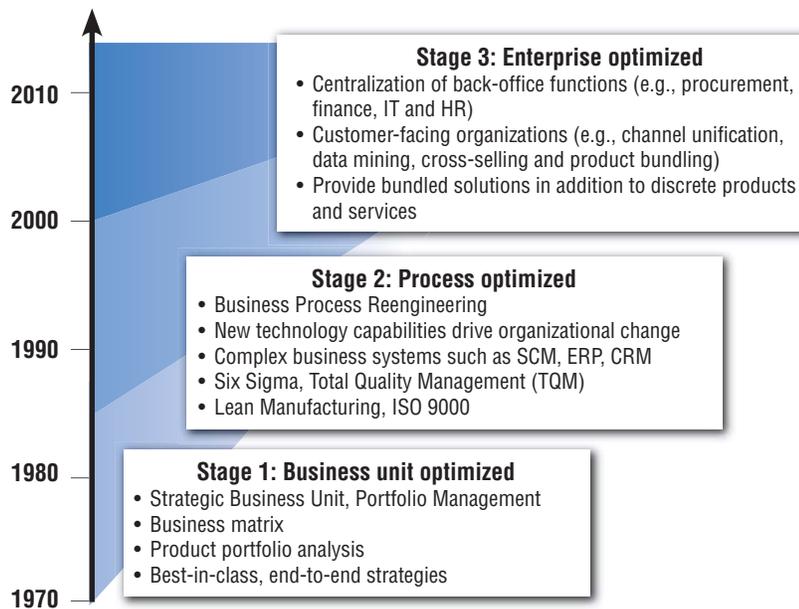
In the area of customers and markets, firms that manage to position themselves at the center of the network can extract economic rents as setters and maintainers of industry standards. In addition, customer relationships deepen with the move toward services and solutions. With the iPod, Apple leveraged its design skills to target markets beyond its traditional base of computer users. The company is also competing in a fundamentally different market from where it started. Rather than Microsoft, its rivals now include Sony and Bertelsmann.

Internal specialization

As seen in Figure 2, the evolution toward external specialization is mirrored by a similar evolution on the internal side. Indeed, the same standardized communication platforms and plummeting transaction costs driving specialization in the external marketplace are creating a similar set of change imperatives within the firm.

In the 1990s, the old, "business unit-optimized" silos were steadily broken up as firms opportunistically consolidated functions. These efforts yielded dramatic benefits: eliminating non-value-added activities, consolidating

Figure 2. The three stages of internal specialization.



Source: IBM Institute for Business Value.

duplicate activities to reduce waste, automating manual activities to boost speed, concentrating activities in service centers to achieve economies of scale, relocating activities to lower-cost geographies and coordinating activities to reduce cycle times.

The resulting “process-optimized” business design has allowed firms to operate more efficiently and boost coordination across the firm. With optimized processes, more people operate in cross-organizational teams, business units share technology costs and risks and the processes themselves enjoy improvements in quality and efficiency.

Yet, a silo mentality often remains. Rigid organizational structures limit knowledge sharing and conceal opportunities to generate new return on investment. New implementations are often inflexible, unscalable and behind the curve. Worse, complexity and interconnection costs begin to grow as process designs must accommodate the idiosyncrasies of different business units (see *The limits of process optimization*).

The ultimate phase of internal specialization involves moving from process optimization to a new ideal: organizing the enterprise as a network of business modules. In this “enterprise optimized” phase, the firm operates as a set of discrete, modular building blocks that interact with all other parts of the firm, as well as with other firms. A common governance model unifies this “federation of modules” under a central purpose: to support the strategic focus of the firm.

CBM: A path to specialization

In an increasingly networked marketplace, specialization is an imperative, not an option.⁴ As the traditional boundaries of the firm are ruptured by the economics of the global connectivity platform and the margins of success are increasingly determined by absolute advantage, focusing on a few critical activities will become a key to survival. But how can enterprises best pursue specialization?

The limits of process optimization

Process optimization is a necessary but not sufficient means for succeeding in today’s networked marketplace. For all its appeal, process optimization still leaves firms with complex, hardwired processes. After initial gains, the law of diminishing returns begins to erode improvements in marginal benefits, while the cost of squeezing out remaining inefficiencies begins to grow.

Worse, as processes are optimized internally, the cost of integrating activities across multiple processes can actually rise, a problem especially acute in large, complex organizations. Part of the issue is that traditional, process-based optimization can leave firms with the same activity optimized dissimilarly across many different processes. So as process improvements create interconnections that reach to multiple business units, complexity increases, causing integration costs to rise as the function of a quadratic equation.² Thus, as process optimization matures, it can actually end up increasing the complexity of the enterprise. The results: higher costs, less flexibility and slower speed-to-market.

This dynamic manifests itself in empirical data that shows very little correlation between the size of a firm and return on equity.³ Some studies have even found a negative correlation, meaning that larger firms actually return less value for shareholders (see Figure 3). At best, this hints that the benefits of scale are far more elusive than most executives assume. At worst, it suggests that the traditional business models of large organizations have historically destroyed huge amounts of shareholder value. Either way, process optimization in this context falls well short of being a general panacea.

Figure 3. As process optimization matures, benefits level off and costs rise.

<i>Annualized shareholder returns 1926 - 2003</i>			
Microcap	Small-cap	Midcap	Large-cap
12.7%	11.7%	11.3%	10.4%

Source: Ibbotson Associates, as cited in “When Patience Pays; Keep your eye on the dividend.” Forbes. June 7, 2004.

Specialization differs from process optimization

Large media and entertainment companies have worked hard to optimize their sales and marketing processes with an aim toward selling television, radio and billboard space more effectively. While they were occupied, however, advertisers were busy changing the rules of the game. Demand is now growing for complete media packages that target consumers through multiple, coordinated channels for a single price. Ironically, process optimization has made the task of meeting this unanticipated shift in demand more difficult.

Specialization avoids such miscues by taking a broader view. Instead of honing processes based on an established way of doing business, media companies could fundamentally rebuild “customer targeting and reach” as a modular capability shared across the entire organization. Such specialization makes companies more resilient and flexible in the face of change. It can also drive superior performance and cost synergies across business units – two major goals of process optimization.

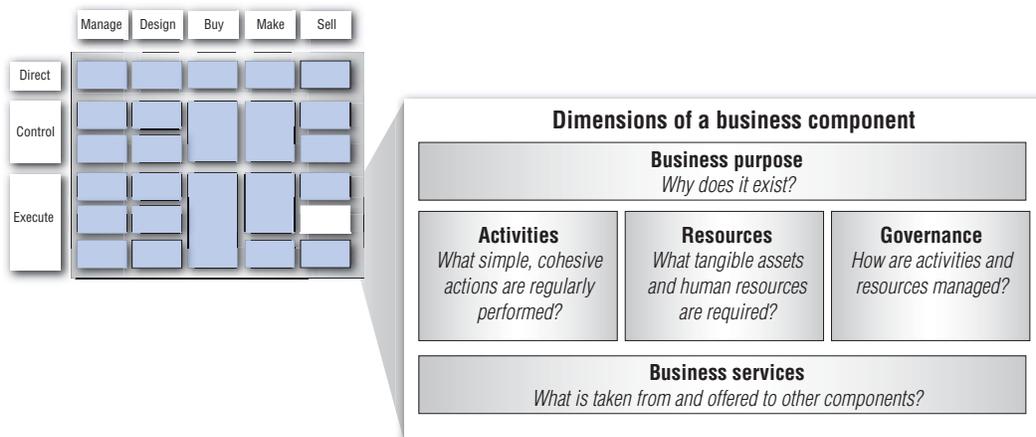
Firms can use the concept of the component business model (CBM) to make the transformation to internal and external specialization a practical reality. CBM allows firms to evaluate the goals and strategy of the entire enterprise to take simultaneous advantage of internal and external specialization. Without increasing complexity, the model allows an organization to expand and evolve while reducing risk, driving business performance, boosting productivity, controlling costs and improving capital efficiency and financial predictability.

So what are business components?

As shown in Figure 4, business components are the modular building blocks that make up the specialized enterprise. Each component encompasses five dimensions:

- A component's *business purpose* is the logical reason for its existence within the organization, as defined by the value it provides to other components.

Figure 4. The five dimensions of a business component: business purpose, activities, resources, governance model and business services.



Source: IBM Business Consulting Services.

- Each component conducts a mutually exclusive set of *activities* to achieve its business purpose.
- Components require *resources*, the people, knowledge and assets that support their activities.
- Each component is managed as an independent entity, based on its own *governance model*.
- Similar to a standalone business, each business component provides and receives *business services*.

For example, a bank decides to gather its credit decisioning activities into a single component. To realize efficiency gains, it centralizes all of the associated people, processes and assets that used to be spread across several business units. It also consolidates financial databases from across the firm, boosting the quality of information on which its decisioning activities rely. Keeping the information in a single place also allows credit appraisers to make better choices when it comes time to assess portfolio information across accounts (say, when a checking customer applies for a credit card). With a much clearer picture of a customer's credit risk, the company can cross-sell its financial products much more effectively.

To drive as much benefit from componentization as possible, the firm takes care to aggregate only "highly cohesive" activities from across the firm – that is, activities that require similar people, process and technology infrastructures. (For details, see *Loose coupling and cohesion*). When determining the boundaries of the component, the company considers *each* of these three dimensions, not just one or two.

Previously, the company had five different groups that handled credit scoring, but the new, streamlined Credit Administration component now takes care of all the activities related to determining the creditworthiness of potential customers, such as administering the application process, allocating credit resources and facilitating compliance with credit policy.

The Credit Administration component has its own management structure and governance model, giving it a high degree of autonomy. In principle, it could operate as

an independent business that serves the main company. It could also provide its services to another company, should the strategic need arise.

As it operates, the new component is highly collaborative, working in concert with other components both inside and outside the company. Collaboration is accomplished through the exchange of services, the inputs and outputs for all components. When it requires an input to complete a particular activity, Credit Administration procures it as a service from another component. That way it is able to gain access to the full range of inputs (such as customer information and account recovery) it requires. Conversely, when another business component requires a Credit Administration service, such as a credit assessment or a credit activity report, the Credit Administration component is set up to provide it as an output. Predefined service-level agreements – covering such aspects as formatting, timing, quantity, quality, payment and provisioning – set the standards for all of these transactions.

This services orientation enables the Credit Administration component to maintain its distinct boundaries while collaborating through "loose coupling" with other components. As business conditions change, each component is able to terminate old links and form new ones with relative ease.

Loose coupling and cohesion

Business components derive much of their advantage from two related but distinct traits: the *loose coupling* of links between components provides flexibility, adaptability and responsiveness, while the *cohesion* of activities within each component provides efficiency and enhanced quality.

Interaction between components is characterized by *loose coupling*. Instead of "hardwired" links based on proprietary or customized connections, components interface through clearly-defined service boundaries, forming and breaking connections as they initiate and respond to service requests. Loose coupling also relies on a common communication code, so that even incompatible underlying systems can be joined on demand. For example, an Internet bank may boost customer service levels by enabling kiosks and Web portals to access call center functions. This aspect of components gives

firms much more scalability in the services they provide and use, as well as more flexibility in deciding whether to source a capability within the firm or outside it. In either case, the component requesting a service is indifferent to how that service is implemented. Indeed, from the outside a component is a “black box” whose inner workings are, for all intents and purposes, irrelevant.

Internally, components deliver scale and efficiency gains through cohesion, the aggregation of similar activities from across the firm into a single logical module. In this sense, building a component is a matter of placing like with like. To achieve cohesion, each activity must belong uniquely within one component with no duplication within or between components.

An added benefit of bringing these activities together is to expose the relative performance discrepancies between true internal specialists and others that are not performing as well. Promoting the practices of the specialists during the integration will have the net effect of raising the overall quality of the service that the integrated component provides to the business or to customers. In effect, this is a practical extension of the concept of sharing internal best practices.

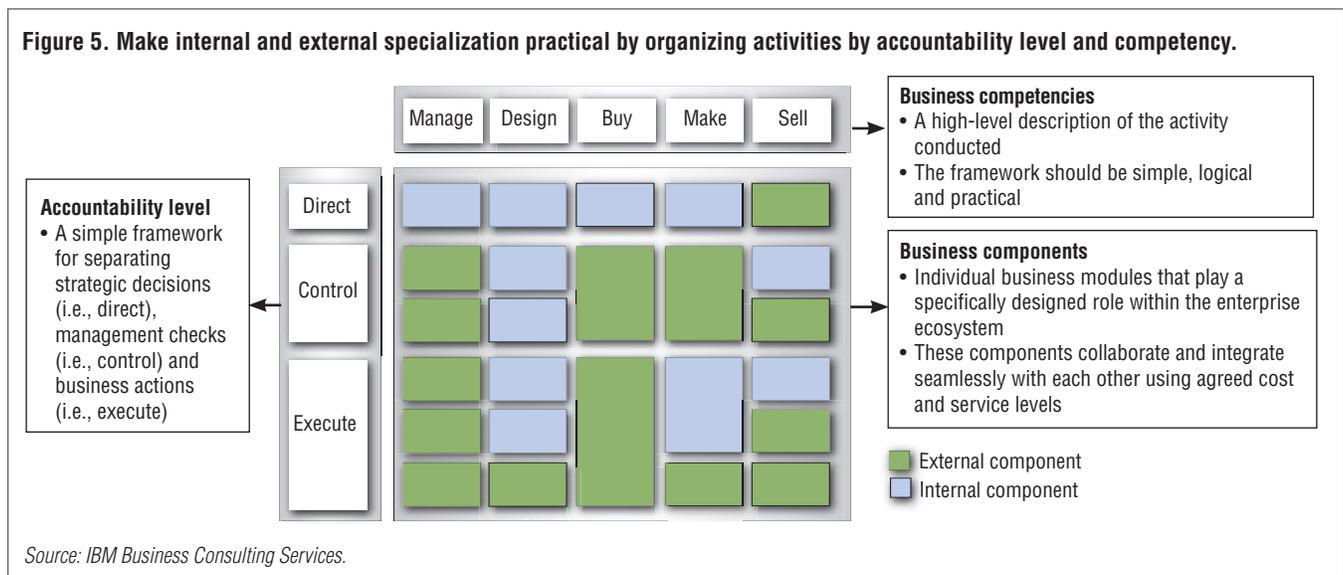
Many companies struggle to achieve cohesion. When the Internet first appeared as a delivery channel, for example, companies commonly built their Web presence

as an entirely new line of business, complete with its own service, cross-sell and marketing activities. This approach left firms offering a confusing and complex mix of user experiences. While a visitor to the Web site might see one set of products and marketing messages, a customer who walked into a store or phoned the call center might be exposed to another. What these companies failed to realize is that service, sales and marketing share highly cohesive activities, irrespective of channel.

The smartest and most elegant way to leverage cohesion is to build the capability once and reuse it across multiple channels, with only the user interface changing to suit the medium. The way in which customers are treated, the range of products and services they are able to choose from, and the marketing messages they are exposed to should be consistent. Failing to consider the cohesion of these activities across people, process and technology has left many companies with dramatically higher complexity.

The CBM framework

As we have seen, components aggregate business activities into discrete modules that can be shared across the firm. But how do components work together within the context of an overall business model? As Figure 5 shows, CBM provides a framework for organizing components by competency and accountability level.



By employing this framework, executives can begin to envision how current business activities might function as an interlocking set of modules.

Categorizing activities by business competency yields a high-level view of components according to the type of value they provide to the enterprise. Different firms in different industries will model their competencies differently, but, in every case, each activity should line up under a particular competency.

Assigning each activity to one of three accountability levels – direct, control and execute – can also help executives begin to flesh out the component vision. The level of a given component should be intuitive, although exceptions will exist.

- *Direct.* Components at this level provide strategic direction and corporate policy to other components. They also facilitate collaboration with other components.
- *Control.* These mid-tier components serve as checks and balances between the “direct” and “execute” levels. They monitor performance, manage exceptions and act as gatekeepers of assets and information.
- *Execute.* These “boots on the ground” components provide the business actions that drive value creation in the enterprise. They process assets and information for use by other components or the end customer.

The three accountability levels imply different priorities. At the “execute” level, for example, the emphasis is on keeping people fully occupied and productive. Components at this level tend to be structured in ways that make information easily available. From a technology standpoint, speed of data entry and realtime availability are key. When customers go to an ATM, for instance, they want a simple interface that provides accurate information in a straightforward format: how much money is in my account?

Contrast this with activities related to the “direct” tier, where such high-level activities as launching new products are handled. This level houses a small number of people who have a very large impact on shareholder value, so the design imperatives are nearly the opposite of those at the “execute” tier. Launching a new product requires collaboration among several elements, including

marketing, risk, finance, regulatory and credit. Input from all of these stakeholders is needed to make the launch a success, so workflow is a key requirement. From a technology standpoint, activities typically require people to discern patterns and trends from rich, multidimensional data, usually stored in a data warehouse. So, systems at the direct level are not designed for speed of data entry, but rather for ease, breadth and depth of analysis. Realtime interfaces are not needed, as data is often months old and processed in batches.

Embracing CBM: A strategic road map

CBM is not simply a way to imagine the future of the organization. It can also be used to put theory into action and drive the evolution toward a specialized enterprise, both internally and externally. This process involves three dimensions: one, developing a component view of the existing organization based on analysis of the business and the market environment; two, evolving toward specialization based on a reinvention plan within the context of changing industry dynamics; and three, advancing the organizational and operational infrastructure toward component-based enterprise optimization.

Developing a component view of the enterprise

A firm can begin to develop a component view of the enterprise by using the CBM framework as an analytical tool to identify the gaps and redundancies it must resolve on the way to becoming a component-based enterprise. A good way to start is by mapping the current business as a network of components. As described in the previous section, this initial analysis involves identifying and grouping cohesive activities into discrete units and testing the overall logic. The result is a “component map.” Figure 6 shows an example of a component map for the retail industry. Of course, every business will have its own, unique perspective on its component structure, despite substantial commonality with other players in its industry.

The component map provides a basis for developing strategic and operating insights for the business. By gauging the relative business value of different areas of the map, executives can determine which components demand immediate attention. As Figure 7 illustrates, this type of analysis yields a “heat map” that highlights the components that represent the greatest economic value.

Figure 6. Mapping the enterprise as a network of business modules: an example from the retail industry.

		Business competencies				
		Customers	Products/ services	Channels	Logistics	Business administration
Accountability level	Direct	Market strategy	Merchandise planning Channel planning	Channel strategy Store design	Network design	Corporate strategy
		Customer service strategy	Assortment planning Space planning Promotion planning	Real estate strategy Internet design	Warehouse design	Corporate planning Financial planning
		Marketing strategy	Product development Sourcing	Catalog/call center design	Demand/flow planning	Corporate governance
	Control	Campaign management	Product flow Planogramming Allocation Inventory mgt/OTB	Channel management Labor management Order management	Inbound routing Receipt scheduling	Business performance management Treasury and risk management
		Service management	Demand forecasting Price management Content management Vendor management	Real estate, construction and facilities management Loss prevention	Delivery scheduling Carrier management	Legal and regulatory compliance Inventory control Cash and banking
		Customer service Customer communications	Item management Product management PO management	Order management Inventory management	Warehouse management Transportation management	Financial accounting and reporting Indirect procurement
	Execute	Marketing	Vendor management	Merchandise management	Fleet management	HR administration
		Advertising	Replenishment			IT systems and operations
		Public relations	Revenue/clearance management	Price/sign management	Reverse logistics	

Source: IBM Business Consulting Services.

Figure 7. Heat maps identify “hot” areas to exploit business value.

		Business competencies				
		Customers	Products/ services	Channels	Logistics	Business administration
Accountability level	Direct	Market strategy	Merchandise planning Channel planning	Channel strategy Store design	Network design	Corporate strategy
		Customer service strategy	Assortment planning Space planning Promotion planning	Real estate strategy Internet design	Warehouse design	Corporate planning Financial planning
		Marketing strategy	Product development Sourcing	Catalog/call center design	Demand/flow planning	Corporate governance
	Control	Campaign management	Product flow Planogramming Allocation Inventory mgt/OTB	Channel management Labor management Order management	Inbound routing Receipt scheduling	Business performance management Treasury and risk management
		Service management	Demand forecasting Price management Content management Vendor management	Real estate, construction and facilities management Loss prevention	Delivery scheduling Carrier management	Legal and regulatory compliance Inventory control Cash and banking
		Customer service Customer communications	Item management Product management PO management	Order management Inventory management	Warehouse management Transportation management	Financial accounting and reporting Indirect procurement
	Execute	Marketing	Vendor management	Merchandise management	Fleet management	HR administration
		Advertising	Replenishment			IT systems and operations
		Public relations	Revenue/clearance management	Price/sign management	Reverse logistics	

Hot components

Source: IBM Business Consulting Services.

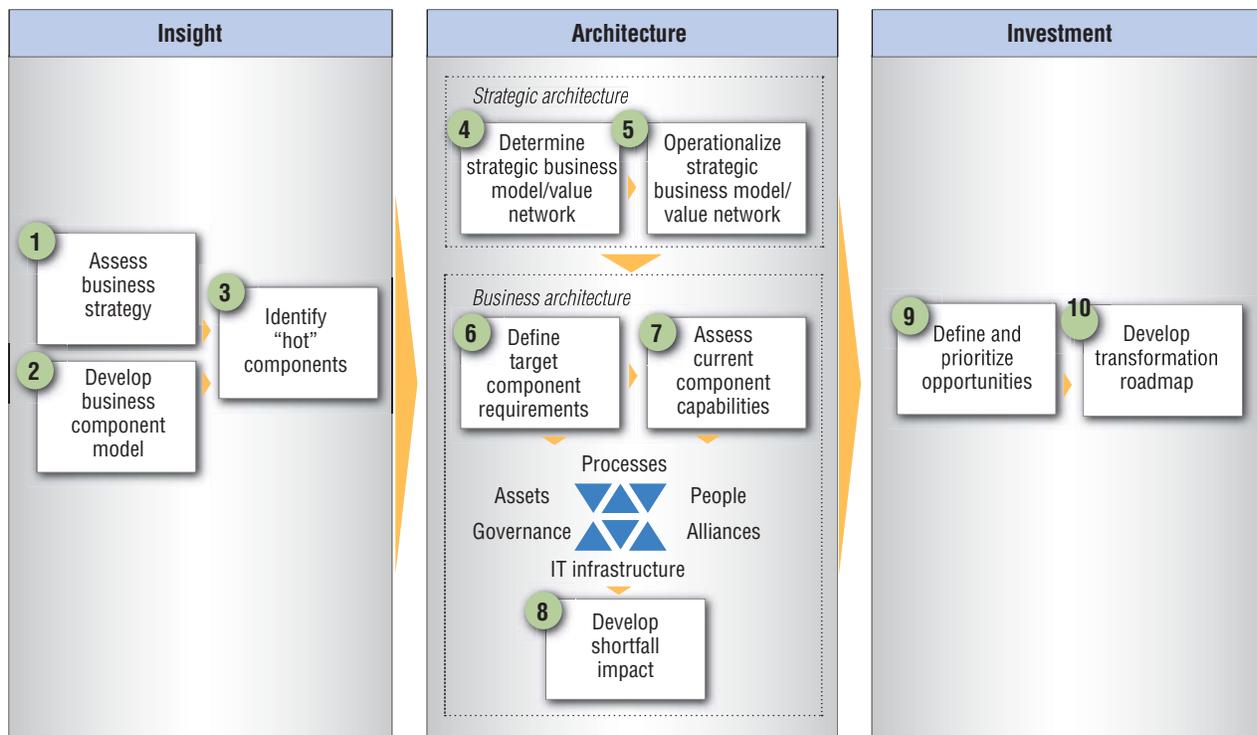
To determine heat map priorities, executives will typically consider the following questions. Which components differentiate them most significantly in the marketplace? Which components have the most dramatic impact on their ability to maintain and grow margins? Which components offer significant cost and capital optimization opportunities?

For example, near-term changes that enhance the firm's strategic differentiators are likely to be designated as "hot" areas. Parts of the business that already resemble components, such as shared service centers, may also be early priorities. Quick wins are typically found when disparate and duplicate functions are consolidated into true operational components. Efficiencies gained in the first round of componentization can be used to support subsequent change initiatives.

After the insight phase of CBM analysis comes the architecture phase (see Figure 8). Here, the firm overlays the heat map onto the existing business. The goal is to identify gaps between the "to-be" vision of the componentized business and the "as-is" view – a representation of how the firm presently organizes its people, processes and technology. To capture the full scope of the firm's current capabilities and market positioning, this "as-is" representation must be firmly grounded in empirical data, such as organization charts, cost drivers, application portfolios, technology investments, key performance metrics and existing processes.

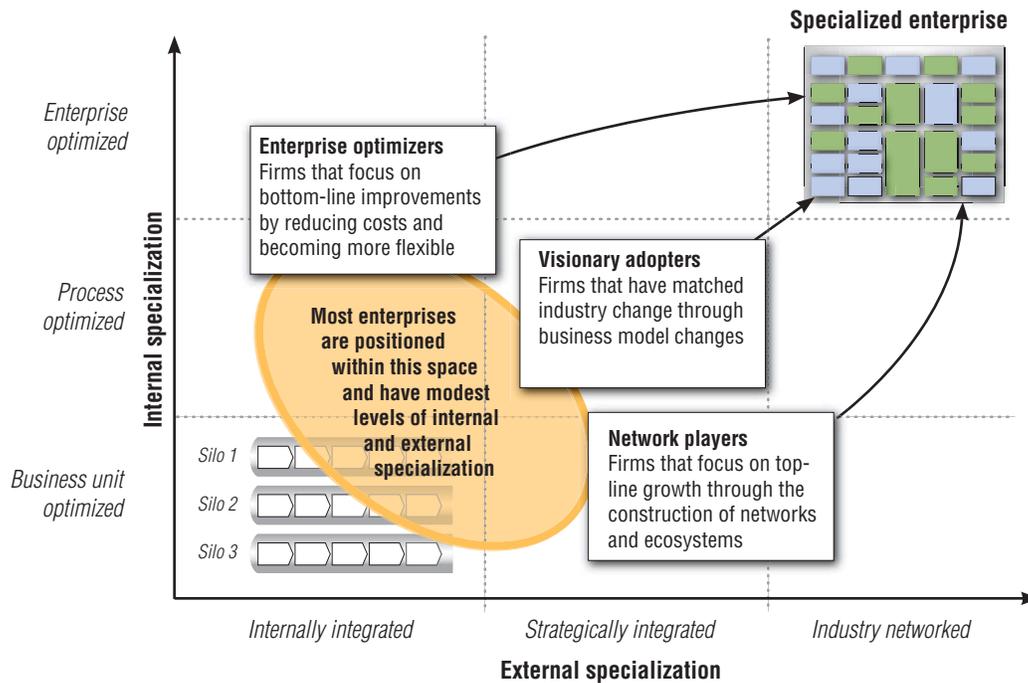
Finally, in the investment phase, the firm decides how to close the gaps: How big a leap can the firm take? How much change can be absorbed? Which areas should the company focus on first? Where are the quick wins?

Figure 8. The three phases of CBM analysis: Insight, architecture, investment.



Source: IBM Business Consulting Services.

Figure 9. Most firms today have a blended process optimized and partnered model and now need to decide where to go.



(Good candidates include activities that are duplicated across processes and organizational units, especially those that would benefit from increased economies of scale, global sourcing options and shared information.) The result of this process is a “transformation roadmap,” a guide the firm uses to begin componentizing an area of the business (say, customer service) as a test case. Success in the initial area provides experience and proof points for further development of components.

Evolving toward CBM-based specialization

An enterprise can evolve toward its component-based vision by developing a reinvention plan. The good news is that many firms have already begun the CBM journey. Process reengineering and outsourcing have provided enterprises with modest levels of internal and external specialization. Most firms today have a blended process-optimized and partnered model and now need to decide where to go.

As shown in Figure 9, a firm can mature toward specialization by considering the role (or, in the vast majority of cases, the *blend* of roles) that provides the greatest competitive advantage in the marketplace. “Network players” focus on external specialization, focusing on top-line growth through the construction of networks and ecosystems. “Enterprise optimizers” drive internal specialization, focusing on bottom-line improvements by reducing costs and becoming more flexible. “Visionary adopters” strike a balance between the two, aligning internal and external strategies with industry trends to move more directly toward a specialized enterprise.

Note that the three roles do *not* represent mutually exclusive approaches. Rather, they highlight the external, internal and blended aspects that *all* companies must take into account as they evolve toward specialization. Over time, the emphasis placed on any particular aspect will tend to vary depending on the firm, the industry and the current level of specialization. Most firms will find they

must iterate between the external and internal dimensions strategically, selecting priorities that position them for further progress toward full specialization. At every stage, the enterprise should align its migration strategy with opportunities that create the most value most quickly.

Network players evolve toward external specialization by growing and differentiating the business through partnerships. In this role, the company seeks to leverage its competitive position to fundamentally alter industry dynamics and build industry networks around the de facto standards they establish. The payoff can be significant. In some cases, entire industry ecosystems can grow up around network players.

In pursuing the network player role, care must be taken to fight the right industry battles. Because absolute advantage is critical to success in a fully networked industry, it is vital for network players to carefully monitor competitors – both traditional rivals and new entrants – and to develop a thorough understanding of the trends that shape the industry network as it matures. Moving ahead of the market is a real risk, as is the chance that the industry will choose to rally around an open standard.

While network players look beyond the enterprise for growth, *enterprise optimizers* evolve toward internal specialization by reinventing – without rebuilding – the enterprise. Optimizers succeed by creating efficiency, flexibility and responsiveness. To overcome organizational inertia, they typically begin the journey with activities that already function as components. These “preexisting” components – shared service centers are one example – provide a momentum-establishing foundation of quick wins (and a funding base for carrying the strategy through to subsequent stages). Enterprise optimizers focus on initiatives that are aligned with the component map, eliminating or adjusting initiatives that do not embrace the specialized enterprise vision, especially those that add process complexity or incur excess costs. Optimizers prioritize the creation of components based on financial value, strategic value and investment requirements. They also consider external issues, such as regulations, that may render componentization unfavorable in some areas.

CBM in financial services

Component Business Models have been used across a wide range of industries, including petroleum, pharmaceuticals, telecommunications, manufacturing, retail and aerospace. In particular, the financial services sector has been an ideal incubator for CBM. Regulatory changes and economic pressures have forced firms to continuously consolidate, resulting in complex organizations and costly redundancies. And with multiple product lines across the enterprise, many firms are still organized by traditional product silos. Increasingly, these ad hoc infrastructures fall short of satisfying the needs of customers, shareholders and employees.

Financial services firms across the globe have implemented Component Business Modeling with undeniable success. For Allied Irish Bank, SEB Group and KB, CBM addressed key operational issues and aligned business and technology requirements.

The shortest path to becoming a mature, specialized enterprise is to optimize both external and internal dimensions simultaneously. *Visionary adopters* match industry changes with business model changes. They are flexible and forward-thinking, maintaining market share and state-of-the-market performance throughout the transformation – a tall order indeed.

Visionary adopters continuously monitor the market for value opportunities and risks, while constantly assessing their componentization plans based on the interplay between the enterprise (internal) and industry (external) views. This requires an ongoing measurement process that provides management with a feedback mechanism for reviewing the performance of components.

Visionary adopters follow best practices, create component benchmarks to support excellence and develop industry benchmarks within and across components. If internal components become best-in-class, they consider offering them externally to generate new revenues. If component performance lags, they leverage external partners.

Allied Irish Bank

Allied Irish Bank is the largest retail and commercial bank in Ireland and one of the largest in Europe, with significant operations in Northern Ireland, the United Kingdom and Poland. Business was booming for Ireland's largest commercial bank because of the country's robust economy, dubbed the Celtic Tiger. AIB wanted to manage the pace of growth and maintain its leadership position.

AIB searched for a group strategy that addressed the complexity of all of the different lines of business, rather than simply implementing single solutions at the divisional level. It understood that business and information technology solutions needed to be linked through a unified, efficient operating model. AIB partnered with IBM to use CBM to isolate and identify the many functions of the bank and break them into distinct business components.

CBM provided AIB with a granular view of the organization, and the framework of autonomous components appealed to a company that wanted to transform itself radically, but remain in control. CBM also fit with the strategic vision of transforming the Bank from a federation of operating divisions to a single Group structure with common processes and a greater use of shared services. In particular, CBM supported analysis of two key drivers in the banking business – efficiency and responsiveness. AIB and IBM used CBM to analyze related metrics against peer performance, and located opportunities to unlock hundreds of millions of Euros in additional value that were sitting within AIB's enterprise.

Going forward, AIB will continue to use CBM to shift its cost structure, which is primarily fixed. By formalizing the business components and the operating model, pieces of the business can move to a variable cost structure and provide greater control and predictability of margins.

SEB Group

The SEB Group is a North European financial banking group for companies, institutions and private individuals, with 670 branch offices in Sweden, Germany and the Baltic States. SEB has more than 4 million customers, of whom 1.6 million are e-banking customers.

The firm had dual challenges of improving bottom-line profitability while simultaneously growing top-line revenues. SEB is pursuing a growth strategy, expanding primarily by acquiring financial institutions in different markets. It was experiencing a lack of profitability in its German branch, and needed to address cost and efficiency issues.

SEB needed a roadmap for the future, and the CBM methodology supported an analysis of the as-is situation while allowing for the development of a target business operating model. The end result was a consistent operating model with shared services and processes across countries, as well as consistency and standardization in applications and product offerings across all of SEB's retail banking units.

In particular, the new model supports greater responsiveness at both the product and corporate level. SEB expects to radically reduce time-to-market for development of new banking products by 50 to 70 percent. Consistent product offerings across its retail banking units allow SEB to quickly develop or customize products for particular markets. The consolidation and centralization created through CBM will also allow SEB to more easily integrate newly acquired banks in the future.

KB

Today, KB (formally Kookmin Bank) has the largest number of customers of any South Korean bank. The company – which specializes in mortgage lending, consumer banking, credit card and asset management – was selected Best Bank in Korea for five consecutive years by *Euromoney* and Best Bank in 2003 by *Asiamoney*.

After the meltdown of the Asia Pacific economies in the late 1990s, the South Korean government initiated extensive consolidation in the banking industry. By 2002, consolidation reached its final phase and big banks like KB could no longer rely solely on size to compete. KB knew it had to differentiate to strengthen its existing relationships with customers and build market share.

There was one main obstacle in KB's path: its siloed organization. The inability of different divisions to communicate and share information was preventing KB from getting a single, consistent view of its customers. Moreover, it was difficult to control costs and optimize operations.

To develop a comprehensive new enterprise model, KB leveraged IBM and its CBM methodology to identify a series of essential building blocks to be used and reused across the bank. Based on this analysis, KB has embarked on several initiatives to implement the operational model.

The bank expects to realize significant cost savings as it evolves through a series of planned initiatives, such as a call center transformation. Overall, KB expects the CBM project will reduce organizational complexity and enable the firm to become more responsive and customer-focused.

Building a component infrastructure

Components are autonomous in the sense that they are freed from the constraints of hardwired processes and organizational silos. But they do not operate in a strategic vacuum. To effectively serve the firm, components must work together toward a common goal – the delivery of sustainable value to the firm's stakeholders. Achieving this alignment of ends requires the right organizational model, process view and connectivity platform.

Successful component-based organizational models balance the need for flexibility and discipline. To be responsive, the governance structure must be tied strongly to the customer value proposition, yet must also provide a clear context of defined relationships and measurable expectations as a basis for component interaction. Value networks should similarly be flexible and resilient, leveraging variable pricing and supply to support fluctuating demand while improving business continuity. Job descriptions should also be variable – based on organizational roles, rapid resource deployment and established methods for sharing knowledge and developing deep capabilities – rather than fixed around departmental structures. Finally, the organization's culture should provide a collaborative work environment that empowers employees to engage in fact-based decision-making.

In addition to a flexible, disciplined organizational model, a successful component infrastructure also requires processes that are responsive across a sequence of components. Under CBM, processes are represented as sequences of activities performed via networks of collaborating components. The placement and timing of decision points that define the course of a process must be appropriate to the requirements of the organizational model. Recognizing and anticipating potential exceptions allows the enterprise to be more resilient.

The right infrastructure can help banks componentize the account opening process

Banks worldwide are looking for ways to eliminate the inefficiencies that plague their account opening (AO) processes, including siloed product organizations, inefficient and repetitive processes, duplication of data and disparate channels. The high cost of AO can primarily be traced to the duplication of effort and systems, as well as the maintenance of interfaces among disparate legacy systems.

To address these problems, banks are centralizing AO activities into components that can be shared across the enterprise. This requires an enterprisewide data and workflow infrastructure that is horizontally rationalized across products and channels. Standardized processes can help banks ramp up business faster in new markets while reaping efficiencies in existing markets. For example, using a single, enterprisewide application form that is digitized and linked to back-office systems can result in real efficiency improvements *and* a less confused customer. During verification, technology can automate most of the process and allow enterprisewide information sharing during verification activities associated with other product sales. Banks can reap additional, significant cost savings by negotiating better procurement rates with providers of external information, such as credit reporting companies.

Connecting to other components that are critical to the AO process, such as a Regulatory Compliance component, can help banks adhere to applicable regulatory provisions and stay in compliance even as new laws are enacted. Similarly, by connecting to a Marketing component, the AO component can take advantage of the latest in neural and heuristic modeling to promote the right mix of products, allowing for a better cross-sell ratio, as well as new and existing customers who are happy to receive tailored products. Each component owner remains focused on the objectives of the component, while the bank's organizational model aligns component objectives to enterprise objectives. This helps to prevent the dilution of focus that can otherwise diminish service levels and derail organic innovation.

Finally, the infrastructure should leverage the full power of the global connectivity platform to support the firm's evolution toward a specialized enterprise. Fortunately, trends in this area continue to be favorable. The combination of high-performance connectivity, widespread technology platforms and open protocols boosts collaboration and reduces the costs of coordination, both within firms and externally with partners. Technologies like broadband, wireless, instant messaging and voice-over-IP streamline collaboration by offering realtime access to information and seamless connectivity beyond traditional boundaries. Complex enterprise activities are increasingly optimized by standard software like enterprise resource planning solutions. Hardware, software and storage costs continue to decline, even as application functionality and processing speeds increase. Open standards like Linux[®], XML and service-oriented architecture and programming (SOAP) help organizations tap the resources of the global connectivity platform while leveraging faster and cheaper plug-and-play substitution.

Conclusion: Leveraging CBM to deliver value

To compete in the emerging world of flexible, open value networks, companies will need to focus on the few activities where they have a truly differentiating advantage in the value they provide or the cost at which they deliver versus the competition. CBM points the way forward by giving executives leverage to drive flexibility, scalability, efficiency and openness throughout the enterprise.

On the external side, CBM-driven specialization makes it easier and less expensive to collaborate with external specialists. A ready ability to tap industry networks enables component-based firms to assemble best-in-

class capabilities and consolidate piecemeal offerings into solutions tailored for ever narrower market segments. The flexibility of open data protocols allows firms to incorporate variable pricing and risk-sharing into service agreements, making margins more sustainable and mitigating the potential downside of entering new markets. Availability and delivery also improve as products and services are exchanged through optimized channels and supply networks built on the global connectivity platform.

On the internal side, CBM enables firms to improve how they manage people, processes and technology. Aggregating people into cohesive groups allows them to focus clearly on what they know best, even as they learn to coordinate cross-organizational operations. Centralizing redundant processes into modules can drive scale gains and best practices across the organization. Finally, componentization reduces the number of technology gaps, overextensions and duplications, allowing the firm to cut non-core investments and identify opportunities to develop new services based on excess capacity in existing technologies.

In the mid 1990s, the rise of the Web and the proliferation of enterprise software packages began to standardize the way companies interoperate. Today, we have reached the tipping point in this process. The global connectivity platform has forever rendered transactions cheap, simple and ubiquitous. In this new environment, proprietary industry value chains are an anachronism, and hardwired business structures are a liability. Firms that adapt will be able to better satisfy the demands of shareholders, employees and customers. Those that resist this change, or fail to comprehend it adequately, will simply not be able to compete in the longer term.

To learn more about CBM and how it can provide a path forward to the specialized enterprise, please e-mail us at iibv@us.ibm.com. To browse other resources for business executives, visit our Web site:

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