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chapter

"Convergence has been the Holy Grail of leaders for a long time. The key is to recognize that it is a journey and not an event."

—Professor John Henderson, Boston University

What Is BTM?

In Brief

The BTM Standard provides a set of guiding principles that create a seamless management approach that begins with board- and CEO-level issues and connects all the way through technology investment and implementation.

The Standard identifies 17 essential capabilities grouped into four functional areas: Governance & Organization, Managing Technology Investments, Strategy & Planning, and Strategic Enterprise Architecture.

The BTM Maturity Model identifies areas most in need of improvement, fixes the starting point for the enterprise, and specifies the path for change.

The right way to approach BTM implementation is iteratively. An enterprise must determine where it is in order to focus on specific priorities, design and implement specific capabilities against those priorities, and then execute and continuously improve.

Over the past few years, a standard for the management of business technology has emerged—a repeatable set of processes, defined in terms of 17 business capabilities, that lead to intelligent and consistent business technology management. This chapter sets forth the particulars of this Business Technology Management (BTM) Standard and argues that it is not only a solution for the problems that plague technology deployment, but also a competitive advantage for firms that adopt it.

In today's world, to manage the business well is to manage technology well. And vice versa.

By now, we certainly know what happens when business and technology are managed on two different tracks. Companies spend 10 percent to 40 percent of their revenues on technology and often just can't shake that sinking feeling that something is wrong.

Hundreds of millions spent by big-name companies on enterprise resource and customer relationship systems have been wasted; nobody thought to redesign underlying work processes or to make sure employees understood what was happening and why. Huge business technology expenditures to lubricate the supply chain of a global apparel maker managed only to wrap that chain around the axle, leaving the company worse off than if it had done nothing at all. As one CEO said in exasperation, “Is this what we get for our \$400 million?”

Such expensive failures have led many observers to question whether information technology can ever produce a defensible long-term competitive advantage.

Unquestionably, there have been enough successes to whet the appetite for the rewards of getting it right. In the late 1990s, for example, Herman Miller began offering small businesses no-frills, quality furnishings delivered quickly at a reasonable price. It established a new operating unit, Herman Miller SQA (“Simple, Quick and Affordable”). By applying business technology exceptionally well, it reduced an industry order cycle of about 14 weeks to about 2 weeks. Sears Home Services consolidated all of its information systems to manage its 12,000 service people. Everything is automated and wirelessly connected. The result is huge savings in parts management, huge increases in productivity of their service people, and significant increases in customer satisfaction.

But on the flip side of exceptional success lies precipitous (or perhaps worse, incremental and undetected) failure. The results have been manifest in productivity shortfalls, imposed workforce reductions, damaged corporate reputations and downward market valuations.

These outcomes threaten to marginalize technology’s role in value creation at the very time that it should be brought closer to the business than ever before. Instead, we are seeing chief information officers reporting to the CFO rather than the strategy office or CEO. More symptoms: a headlong rush to outsource business technology, and choke-holds on technology spending, without any truly strategic understanding of either move. With that often comes a pattern of serial CIO—and maybe CEO—replacement, which virtually guarantees that short-term thinking will

rule. What appears at first blush to be the fault of the technologist (“Can’t you make this stuff work?”) is really a failure to unify business and technology decision making.

Key Terminology

This book develops a new model for managing business and technology. It uses terms that may be new to some, and it uses familiar terms in specific ways that reflect this new model. Here are the most important:

IT, IT assets, and information technology are equivalent terms. They all refer to tangible items ranging from hardware to software to telecommunications to personnel. IT can be thought of as being composed of technology-related goods and services that are typically purchased in discrete quantities. By itself, IT offers only potential value. IT investments and IT capital are investments directly tied to the purchase of IT.

Business technology is the application of IT to deliver a business capability or automate a business operation. Business technology can be thought of as the result of configuring, implementing, applying, and using IT to produce a business result. Business technology investments and business technology capital are investments related to the creation, use, and maintenance of business technology.

Business Technology Management (BTM) is a management science applied to business technology that unifies and improves decision making. BTM provides a structured approach that lets enterprises align, synchronize, and even converge business technology and business management, thus ensuring better execution, risk control, and profitability. BTM investments are investments related to the creation and realization of BTM capabilities.

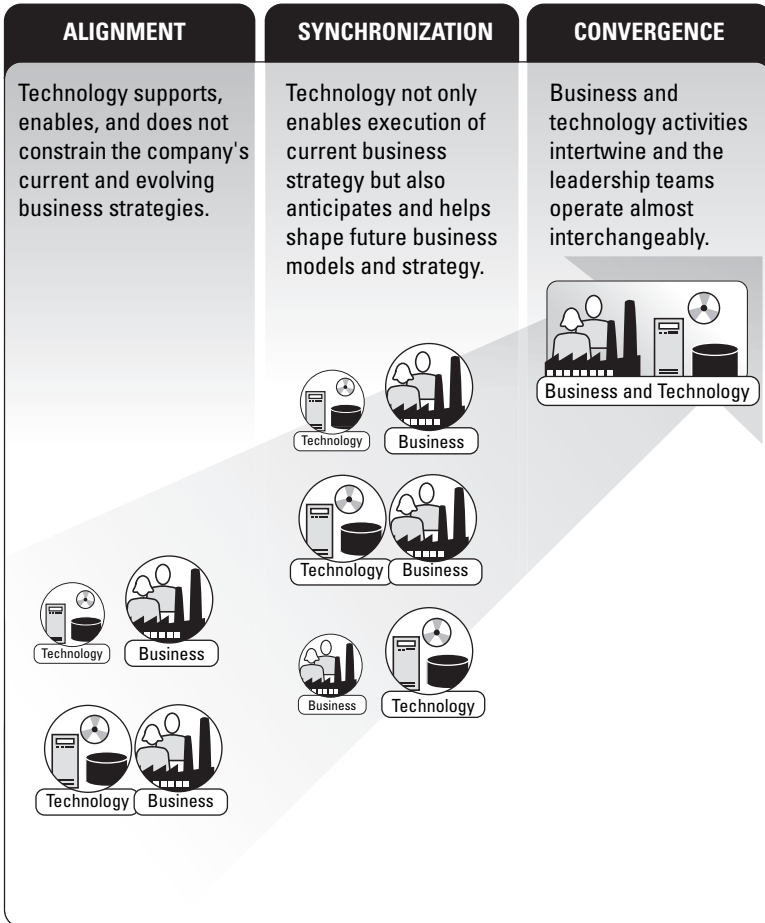
A Business Technology Management (BTM) capability is a specific competency defined by four critical dimensions: Each capability is ordered by *repeatable processes*, executed through appropriate *organizational structures*, and enabled by the right *information* and *technology*. There are 17 capabilities grouped into four functional areas: Governance & Organization, Managing Technology Investments, Strategy & Planning, and Strategic Enterprise Architecture.

Companies can move beyond alignment

For many enterprises or operations, *alignment* of business technology with the business has been considered the Holy Grail. Alignment can be defined as a state where technology supports, enables, and does not constrain the company's current and evolving business strategies. It means that the IT function is in tune with the business thinking about competition, emerging threats and

Figure 1.1 Alignment, Synchronization, Convergence

The three states of alignment, synchronization, and convergence demonstrate different relationships between business and technology.



opportunities, and the business technology implications of each. Technology priorities, investments, and capabilities are internally consistent with business priorities, investments, and capabilities.

When that's the case, the company has reached a level of BTM that relatively few have achieved to date. Alignment is a good thing, and sometimes sufficient to serve a particular business situation.

But there are higher states to consider (see Figure 1.1), and for some enterprises, synchronization of technology with the business is the right goal. At this level, business technology not only enables execution of current business strategy but also anticipates and helps shape future business models and strategy. Business technology leadership, thinking, and investments may actually step out ahead of the business (that is, beyond what is “aligned” with today's business). The purpose of this is to seed new opportunities and encourage farsighted executive vision about technology's leverage on future business opportunities. Yet the business and technology are synchronized in that the requisite capabilities will be in place when it is time to “strike” the strategic option.

Finally, there is the state of *convergence*, which assumes both alignment and synchronization, with technology and business leadership able to operate simultaneously in both spaces. Essentially, the business and technology spaces have merged in both strategic and tactical senses. A single leadership team operates across both spaces with individual leaders directly involved with orchestrating actions in either space. Some activities may remain pure business and some pure technology, but most activities intertwine business and technology such that the two become indistinguishable.

Is this actually possible? Quite so. Examples are abundant for alignment, less so for synchronization, and still fairly rare for convergence. More important, however, how does an enterprise decide what state it should be pursuing, and how does it get there?

Business Technology Management (BTM) is an emerging management science, grounded in research and practice, that aims to unify decision making from the boardroom to the project team.

The role of BTM

Business Technology Management (BTM) is an emerging management science, grounded in research and practice, that aims to unify decision making from the boardroom to the IT project team. The standard described in this book and put forth by the BTM Institute provides a structured approach to such decisions that lets enterprises align, synchronize, and even converge technology and business management, thus ensuring better execution, risk control, and profitability.

Companies have employed a number of methodologies and techniques to improve business and technology alignment. Although many of these methods have acknowledged strengths, they represent piecemeal solutions.

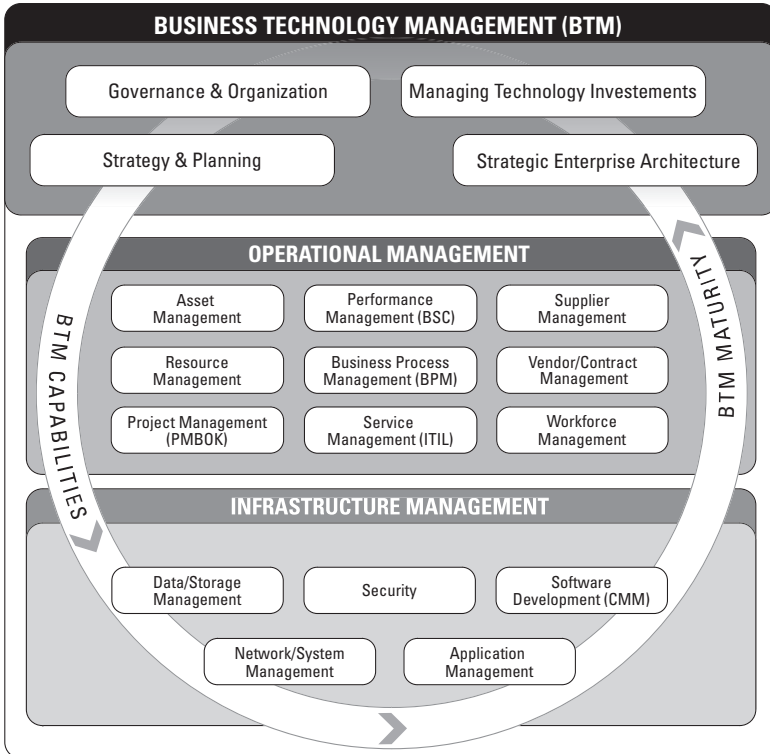
Disparate islands of practice exist within the technology management domain (see Figure 1.2), particularly in the areas of operations and infrastructure. These range from the Software Engineering Institute's Capability Maturity Model (CMM) to PMI's Project Management Body of Knowledge (PMBOK) and the IT Infrastructure Library (ITIL) for services management. However, none of these approaches focuses on integrating and enabling the capabilities necessary to achieve strategic business technology management and the sustainable value that follows. But the danger of relying solely on downstream technology management methodologies is that by the time misalignment becomes apparent, it may be irreversible.

The BTM Standard provides a set of guiding principles around which a company's practices can be organized and improved. It builds bridges between previously isolated tools and standards for business technology management. Essentially, BTM sits strategically above operational and infrastructure levels of technology management. The standard aims to create a seamless management approach that begins with board and CEO-level issues and connects all the way through technology investment and implementation.

The BTM Framework identifies 17 essential capabilities grouped into functional areas: Governance & Organization, Managing Technology Investments, Strategy & Planning, and Strategic Enterprise Architecture. These capabilities are defined

Figure 1.2 Other Management Frameworks

BTM integrates and enables the capabilities necessary to achieve strategic business technology management.



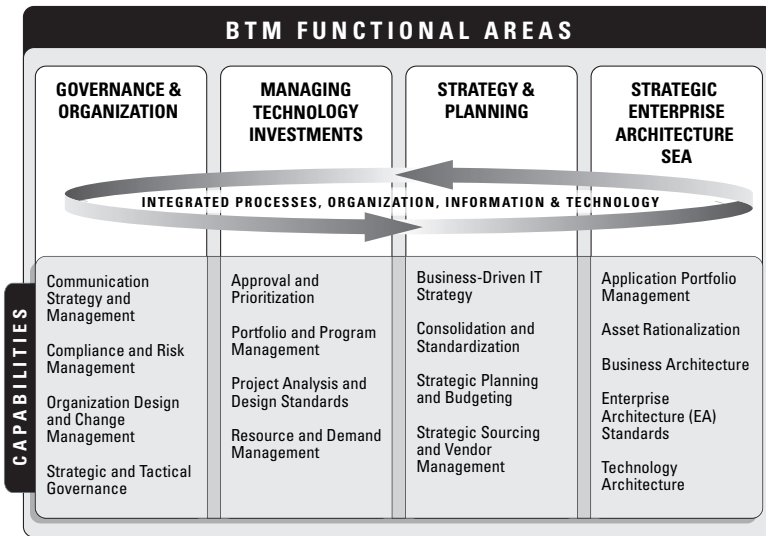
and created by four critical dimensions: processes, organization, information and technology (see Figure 1.3).

BTM has four critical dimensions

As illustrated in Figure 1.4, the first dimension for institutionalizing BTM principles is a set of robust, flexible, and repeatable processes. Simply defining these processes is insufficient, however. To effectively implement BTM requires that processes be evaluated to ensure the following:

Figure 1.3 The BTM Framework

The 17 BTM capabilities are defined across four functional areas.



- General quality of business practice—Doing the right things
- Efficiency—Doing things quickly with little redundancy
- Effectiveness—Doing things well

Management processes are more likely to succeed when they are supported by appropriate *organizational structures* based on clear understanding of roles, responsibilities, and decision rights. Such organizational structures generally include the following:

- Participative bodies, which involve senior-level business and technology participants on a part-time but routine basis
- Centralized bodies, which require specialized, dedicated technology staff
- Needs-based bodies, which involve rotational assignments, created to deal with particular efforts

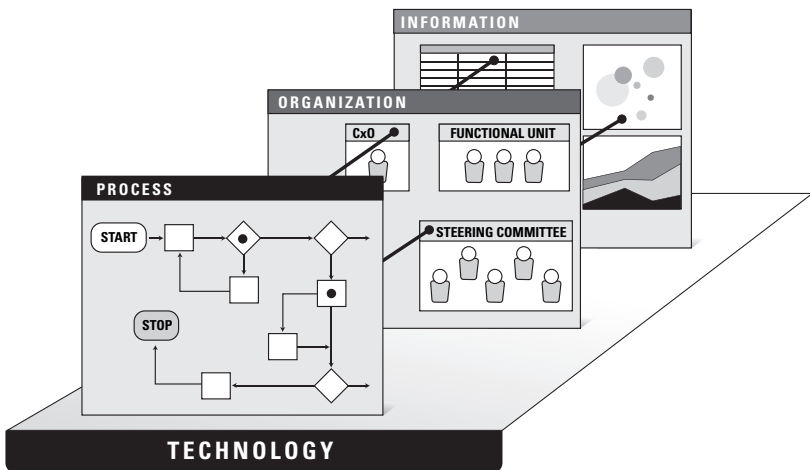
The right set of structures will vary according to an enterprise's value discipline, its primary organizational structure, and its relative BTM maturity. Centralized bodies, such as an Enterprise Program Management Office (EPMO), tend to require specialized, dedicated staff. Participative bodies, such as a Business Technology Investment Board, are ongoing, part-time assignments for their participants—the key stakeholders. Needs-based bodies—functionally specialized groups such as project teams—tend to be rotational assignments created in response to particular needs. These bodies set direction, guide specific business technology activities, and systemically execute against approved plans.

Valid, timely *information* is a prerequisite for effective decision making. This information must be delivered in a way that is comprehensible to non specialists and, at the same time, actionable in terms of informing choices that matter. Useful information does not just happen. It depends on the interaction of two related elements: data and metrics.

Data must be available, relevant, accurate, and reliable. Metrics distill raw data into useful information. Thus, metrics

Figure 1.4 **Critical Dimensions of BTM**

The four critical dimensions of BTM are processes, organization, information, and technology.



need to be appropriate and valid for strategic and operational objectives. Internally, they should be comparable across the enterprise and across time; and externally across industries, functions, and extended-enterprise partners.

Management processes based on flawed information will fail when confronted with conditions that exploit the flaws. As an illustration, consider a major retailer of auto parts that spends millions acquiring and analyzing customer data to determine where their customers live. The retailer then sites new stores in strip malls near these neighborhoods only to be disappointed to discover the new stores' sales *lag* the older stores. As it turns out, "where the cars *live*" is a poor predictor of success compared to "where the cars *work*." Locating stores along major routes to and from primary employers would produce much better results. As this example illustrates, flawed information need not be incorrect—just inappropriate for the intended use.

Effective technology (that is, management automation tools) can help connect all the other dimensions. Appropriate technology helps make processes easier to execute, facilitates timely information sharing, and enables consistent coordination between elements and layers of the organization. It does this through the following:

- Automation of manual tasks
- Reporting
- Analytics for decision making
- Integration between management systems

The simple addition of technology to automate existing processes leaves most of its potential value untapped. The largest gains result from the optimization of processes, organizational structures, and information flows. The complexity of managing the business technology function and increasing demands of an ever-evolving business climate require more information transparency and operational synchronization than basic computing tasks can provide. The appropriate use of technology should not only ease the development and reporting of information needed to fuel management processes across the organization, but also to achieve consistent horizontal and vertical management integration.

A BTM capability is therefore defined as a competency achieved by applying well-defined processes, appropriate organizational structures, information, and supporting technologies in one or more functional areas. Successfully implementing any of these capabilities will move an organization closer to the goal of business and technology unification. This progress accelerates as each additional capability is realized and continuously improved.

The 17 capabilities are interrelated and interdependent or “networked.” All of them should be implemented to maximize the business value of technology investments. But doing so requires a carefully orchestrated approach with top-down and bottom-up support. It also involves business and technology groups in equal measure—plus hard work and time, of course.

Leadership Insight

P.A.M. Berdowski on Synchronization

P.A.M. Berdowski is the COO and CIO of Royal Boskalis Westminster, a dual role that gives him a unique perspective on managing business and technology together. In an interview, he explained his company’s strategic view of business technology.

“We’re In It Together”

When P.A.M. Berdowski joined Royal Boskalis Westminster, the big international dredging company in Holland, in 1997, he encountered a sprawling and struggling operation. The company had harbor and waterway projects underway in 50 countries, but it was trying to coordinate everything from human resources to vessel maintenance with antiquated

systems. The company’s business technology assets were home built, were not standardized, and could not talk to each other. And they were 10 years old.

In recognition of the strategic value of business technology, Berdowski was named COO and CIO, a novel blending of roles. “This was essential to the changes we needed to make,” Berdowski said in an interview. “You will encounter resistance to new ideas. People will say, if you do this you

will destroy the business, and it is almost impossible for IT people to overcome that resistance. In my position, I could balance the competing ideas. I'm not saying you should ignore problems. But I could say to my business colleagues, listen guys, at the end of the day, we're in it together. I'm responsible for running the business. Trust me, this is the best solution. It's not them, it's not us. We're all together."

This was a deliberate decision to move Boskalis beyond alignment, where the IT department supports the business, and even beyond synchronization, where business and technology executives share in leading the company forward. This was convergence, where business and business technology become one and the same.

Technology becomes strategic

Berdowski and other executives realized that their ambitious growth goals would require significant change. "We came to the conclusion that we had to completely reengineer our model," Berdowski says. "We had to completely reengineer from a business point of view, but as a consequence of that, we had to also reengineer from an IT point of view. We believed that by optimizing our operational strength in this way we would also by definition strengthen our competitive edge.

"Information and communication technology (ICT) was an important cornerstone in improv-

ing our competitive edge. So I lifted the whole issue from the level of technical operational people to the strategic. This is one of the key elements in the strategy. This is one of the key factors for success. If you really want to achieve 20 percent growth in the next five years, technology becomes a strategic issue."

Strategic to Berdowski means that the board plays an active role. "If you're really convinced that IT is critical for the future of your business, you have to understand why that is. You hope the board has a view on their business, a view on what they want to reach in the next five years. I'm not talking about financial goals. At the end of the day, it's an outcome in specific business goals. What is happening in the market, what are your competitors doing, how can you beat your competitors? What is the essence of your business as far as people and equipment are concerned, but also systems? How can IT help you really improve your competitive edge? For us, that was a very important starting point. In some industries, IT is purely cost. Boards have changed. They no longer have a view of operations. They look at financial markets. A lot of board members don't run their businesses any more. I see situations in which IT has become a budget issue but not a business issue."

"We did it, guys."

The company first looked at its

business architecture, then its technology architecture. “We started by defining the essence of our business model,” Berdowski says. “Then we translated that into the essence of the kernel we needed in four layers to make sure 20 critical processes were congruent. It didn’t mean they were exactly the same. But we made sure that where you needed the same type of information it was well defined. How do we define a supplier, an invoice, what country codes do we use? Simple things, but you can spend lots of time getting everyone lined up.”

Berdowski wanted a more integrated system. “We can use different types of systems as long as they all fit into the same model from a

business point of view and from an IT point of view.” When he started, 30 of the 40 people in ICT were building homemade systems. That has been turned completely around.

He worked from a blueprint, but wasn’t a slave to it. “It’s good to know where you’re going but to be flexible in getting there. We take a lot of time to decide what we want. We never start an IT project if we don’t know what we want. Nobody gets a green light to step into any IT project if it’s not well defined.”

This year Berdowski invited his four top people to a dinner to celebrate what they had accomplished, starting back in 1997. “Eight years later,” he said to them, “and we did it, guys.”

These 17 capabilities are grouped into the functional areas described in more detail next: Governance & Organization, Managing Technology Investments, Strategy & Planning, and Strategic Enterprise Architecture (see Figure 1.3).

Governance & Organization

This functional area is focused on enterprise CIOs and business executives concerned with enterprise-wide governance of business technology. The capabilities that must be developed to support this functional area ensure that required decisions are identified, assigned, and executed effectively. Necessary capabilities also include the ability to design an organization that meets the needs of the business, manages risk appropriately, and gives proper consideration to government, regulatory, and industry requirements. Four capabilities constitute the Governance & Organization functional area:

1. The *Strategic and Tactical Governance* capability establishes what decisions must be made, the people responsible for making

- them, and the process used to decide. This relates to a full range of business technology governance issues, investment decisions, standards and principles, as well as target business and technology architectures.
2. The *Organization Design and Change Management* capability establishes the makeup of work groups, defining and populating levels, roles, and reporting relationships to enable technology-based business initiatives. This capability also supports structuring and administering organizational and individual incentives as well as designing programs to foster quick and effective adoption of change.
 3. The *Communication Strategy and Management* capability establishes overall strategy and tactics for creating broad-based understanding and getting actionable information throughout the organization. In particular, this capability facilitates the management of communications associated with large-scale change programs and business-technology synchronization.
 4. The *Compliance and Risk Management* capability ensures that government and regulatory requirements are understood and met with regard to business technology initiatives and that appropriate risk mitigation strategies are in place.

Managing Technology Investments

This functional area focuses on the Enterprise Program Management Office (EPMO) and other technology and business executives who are concerned with ensuring selection and execution of the right business technology initiatives. The capabilities that must be developed to support this functional area ensure that the organization understands what it owns from an IT standpoint, what it is working on, and who is available. The organization must make certain that business technology investment decisions are closely aligned with the needs of the business and that technology initiatives are executed using proven methodologies and available technology and IP assets. Four capabilities constitute the Managing Technology Investments functional area:

1. The *Portfolio and Program Management* capability identifies, organizes, and manages existing IT assets and projects. This

- capability is focused on effective program monitoring and execution. This includes the development of enterprise project and asset portfolios along with appropriate reporting.
2. The *Approval and Prioritization* capability determines the criteria used for evaluating alternatives, specifying the evaluation process, and prioritizing technology investments. The creation of enterprise business cases and the definition of appropriate selection criteria and mechanisms are thereby enhanced.
 3. The *Project Analysis and Design* capability drives technology-enabled business improvements and leverages re-usable IT assets. This allows the integration of Enterprise Architecture (EA) and governance with a system development life cycle (SDLC).

Research Insight

Professor John F. Rockart on Leadership

John F. Rockart, Senior Lecturer Emeritus of Information Technology at the Sloan School of Management at MIT, has been a student of technology management for nearly half a century. In these excerpts from an interview, he relates how business technology's role in the organization has evolved.

"We've Come a Long Way"

History of business technology

"I've been observing IT since 1957. In the early days, the late 1950s and early 1960s, the field was not a field. It was a simple back-office functional area often run by somebody who came out of the accounting department and who was working either with punch cards or the first rudimentary computers. At that point, this person reported two or three levels down from the CFO.

"As the technology got better and better and better, slowly but surely, IT took over just about everything in the accounting department. Then came order entry procedures and basic transaction processing. At this point, the CFO became much more involved. It was not really until perhaps the past 20 to 25 years that line management has started to get somewhat involved. It was in the early 1980s that I, and some others, started to call on line management to take a stronger role.

“Starting about that time, it became important for the success of the business for IT to be involved heavily in major transaction processes. However, these could not be designed or implemented well without a full understanding of what the business was all about and how the business operated. And that understanding really had to come from business executives.

“In the mid 1980s, we started to talk to business leaders about this need and found some receptive, but not many. For about the next 15 years, we talked about starting a course called “IT for the Non-IT Executive,” because we recognized the importance of line leadership. But we didn’t get much of a reception. It’s really been in the last five, six, seven years that non-IT execs have started to say, ‘I really have to understand IT.’ As a result, one of the most popular executive courses at MIT right now is ‘IT for the Non-IT Executive.’ We offer it three times a year for 75 to 100 people each time.

“Many management teams, but far from all, have now caught on to the fact that IT is just one of the tools in the business. Twenty years ago, as a line manager thought about his strategy, he focused on three major assets—people, money, and machinery. Today, since IT is now in many companies more than 50 percent of the machinery, the focus is now four-fold—people, money, machinery, and IT.

“No executive today would turn to the CFO and say, ‘I don’t

understand this money stuff. Take care of it and keep me out of the loop.’ Or turn to the head of HR and say the same thing about people. But some managers today are still effectively saying this sort of thing about IT. There are far fewer of them. This doesn’t happen in most major companies any more, but you still find it in small and even some midcap companies. However, this attitude has significantly changed over the last 20 years.

The need for convergence

“One thing that is very clear to me is that the BTM approach, not just alignment, but synchronization, is correct. I would hope for convergence some day. Given the need for convergence, there is a significant need for more IT education of line managers. It’s also a reason that, at MIT, a number of the courses in the master’s program I taught were aimed at line managers or potential line managers. Students now want to understand enough about IT to get heavily involved, although they only know the basics about technology itself.

“If this is to be successful—and I refer to the entire IT revolution we’re undergoing that will make companies much more competitive—the degree of understanding of the business by IT and the degree of understanding of IT by business has clearly got to be better than it is today. I think we’re a lot better today on the understanding of business by IT, certainly in major companies. I watch time and time again where the fundamental choice of who is to be the CIO is

based on how good a business person the candidate is. We're still probably far less from there on the other side.

"We've come a long way from the day in which a data processing manager ran IT to a day in which there is a shared understanding at the senior executive levels that there needs to be a very close convergence between the business leaders and the IT leaders, that they each need to be, to some

extent, the other guy. The IT guy has got to be a business leader and the business leader has to understand IT. We're not at the point where each can do the other's job. We're still a long way away, and we will never close that gap because there's a need for expertise on each side. In some companies, we're coming very close to what I would call the ideal roles, dual roles to make IT work effectively in the organization."

4. The *Resource and Demand Management* capability is used to quantify, qualify, and manage business technology demand and resource requirements. It supports and promulgates the process for categorizing and prioritizing business technology requests to ensure that they are consistent with required business capabilities, priorities, budgets, and capacity. This capability also guides the allocation of high-value scarce resources.

Strategy & Planning

This functional area focuses on enterprise CIOs, divisional CIOs, and business executives who are responsible for the efforts to synchronize business technology with the business. The capabilities that must be developed to support this functional area ensure that a target set of applications will meet the needs of the business and reduce overall complexity. In addition, annual planning and budgeting must incorporate elements of business technology strategy and other evolving needs of the business. Four capabilities constitute the Strategy & Planning functional area:

1. The *Business-Driven IT Strategy* capability articulates required business capabilities and the technology plans to enable them. This allows an organization to translate business strategy into specific required business capabilities. It defines principles to

- guide decisions on applications and infrastructure and supports plans for moving from as-is to target architectures.
2. The *Strategic Planning and Budgeting* capability is necessary to define and link plans and budgets to strategy and enterprise architecture. Goals, milestones, and contingencies are identified and highlighted, as are planning assumptions and prerequisites.
 3. The *Strategic Sourcing and Vendor Management* capability deals with creating and managing relationships with those vendors best suited to an organization's strategy. This includes identifying areas of strategic opportunity for outsourcing, co-development, and vendor selection.
 4. The *Consolidation and Standardization* capability integrates accumulated or acquired IT units and assets to ensure consistency with an organization's strategy. This delivers improved performance by rationalizing the number of projects, assets, sites, and processes. It also extends to identifying which assets to eliminate, consolidate, or enhance, and which to standardize on.

Strategic Enterprise Architecture

This functional area focuses on the Office of the Chief Technology Officer and business and technology executives who are concerned with the overall architecture and standards for the enterprise. The capabilities that must be developed to support this functional area ensure that appropriate information and documentation exists to describe the current and future-state environments. Also, it is necessary to verify that business and technology people can implement strategies and plans and make recommendations simplifying the existing business technology environment. Five capabilities comprise the Strategic Enterprise Architecture functional area:

1. The *Business Architecture* capability is used to describe the business strategies, operating models, capabilities, and processes in terms actionable for business technology.
2. The *Technology Architecture* capability defines the applications and technical infrastructure required to meet enterprise goals

and objectives. This includes the creation of application models, data models, as well as associated technical infrastructure models for the enterprise.

3. The *Enterprise Architecture (EA) Standards* capability is necessary to define standard business technology applications, tools, and vendors. This capability centers on the delivery of EA guiding principles, plus assessing and defining other governance requirements. Also included are standards for IT vendors and reusable assets, including design patterns and services.
4. The *Application Portfolio Management* capability is employed to establish and manage portfolios of applications, consistent with IT strategy, and to achieve target architectures and maintain standards.
5. The *Asset Rationalization* capability applies enterprise architecture and standards to simplify the infrastructure. This reduces complexity and cost by controlling the number of applications and systems.

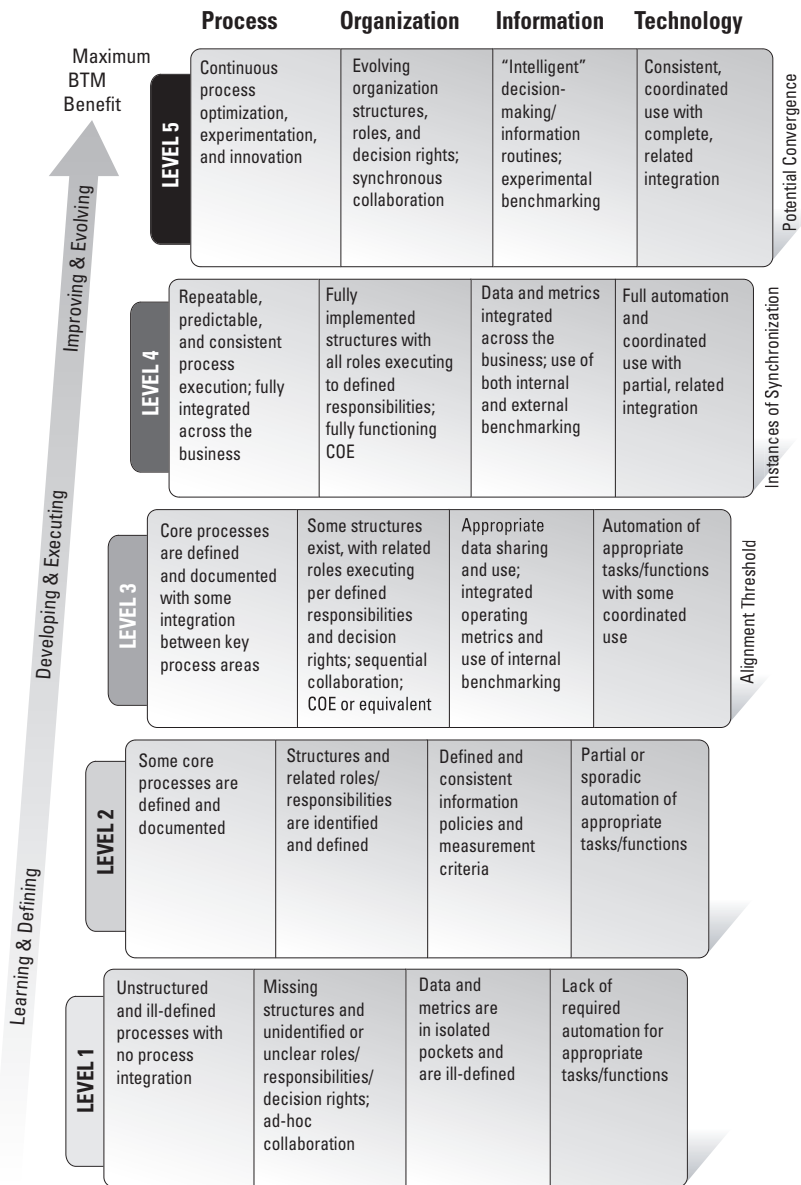
The BTM Maturity Model measures a firm's progress

Given the interconnectedness of the 17 capabilities and the importance of approaching them on a clear priority basis, it is critical that an organization understand its maturity relating to them. The BTM Maturity Model (see Figure 1.5) defines five levels of maturity, scored across the four critical dimensions described previously: process, organization, information, and technology.

A maturity model describes how well an enterprise performs a particular set of activities in comparison to a prescribed standard. This instrument assists in levying a grade based on objective, best practice characteristics. A maturity model also makes it possible for an enterprise to identify anomalies in performance and benchmark itself against other companies or across industries. The measurement of BTM capabilities through the BTM Maturity Model identifies areas most in need of improvement, fixes the starting point for the enterprise, and specifies the path for change.

Figure 1.5 **The BTM Maturity Model**

The BTM Maturity Model identifies areas most in need of improvement, fixes the starting point for the enterprise, and specifies the path for change.



A growing body of BTM Institute and Enamics research shows that at level 1, enterprises typically execute some strategic business technology management processes in a disaggregated, task-like manner. A level 2 organization exhibits limited BTM capabilities, attempts to assemble information for major decisions, and consults IT on decisions with obvious business technology implications. Enterprises at level 3 are “functional” with respect to BTM, and those at level 4 have BTM fully implemented. Organizations achieving level 5 maturity are good enough to know when to change the rules to maintain strategic advantages over competitors who themselves may be getting the hang of BTM.

The evidence shows that enterprises at lower levels of maturity will score lower for business technology productivity, responsiveness, and project success than enterprises at higher levels. As BTM maturity extends past level 3, the resulting synchrony of business strategy and technology delivery makes the enterprise more agile and adaptable. For such companies, changes in the business landscape impel appropriate adjustments to strategy and corresponding action without major disruptions or anguish.

Leadership Insight

Hideo Ito on CEOs

In these excerpts from an interview, Hideo Ito, Chairman and CEO of Toshiba America, Inc., explains how a CEO must think about business technology.

The CEO's New Imperative

“For a long time, Toshiba—and many companies in Japan, Europe, and the United States—didn't think of IT strategy when we thought of business strategy. IT was always just information processing, something done in a back room.

Today, IT strategy should be part of the business strategy, a major element of strategy and planning.

“To lead a company, the CEO needs to understand how IT affects business decisions. For example, it's necessary in collecting all the data the CEO needs for reviews. But, more than this, the CEO needs to know how IT plays a role in all of the organization's processes, from

the customer through production and logistics.

“Today, however, the maturity of IT management is at the infant level. All too often we have an IT expert in the company who notices something new and thinks it will be beneficial and asks for money to produce it. But these decisions should be much more systematic. I don’t like to confess that many companies, as we, are still dependent on the technology person’s

capability—for good or bad, we don’t know.

“We used to view logistics separately; it was just trucks and customs. But now, it’s integrated; it’s a very important part of our business. If managed well, it can save time and money. Now IT has to be viewed the same way, as an integral part of the business.

“But, unfortunately, managing IT is still an art, not a science.”

Emerging opportunities are sensed and addressed more quickly. Project execution to deliver new capabilities is more sure-footed. As joint management of business and technology improves, the maturity of the enterprise is reassessed to focus the next set of priorities. As gains result from BTM, remaining weaknesses become more obvious and the business case for addressing them becomes more compelling.

BTM can be implemented in five steps

But where to start? The job of implementing 17 BTM capabilities and measuring progress using the BTM Maturity Model can seem overwhelming. After all, every enterprise starts from a different place, with existing investments in systems and business processes that make starting over virtually impossible.

So don’t start over. Start anywhere.

The right way to approach BTM implementation is iteratively. Fundamentally, an enterprise must determine where it is in order to get focused on specific priorities, design and implement specific capabilities against those priorities, and then execute and continuously improve.

You not only can, but you actually must begin by recognizing where the enterprise stands with regard to BTM maturity. Only by respecting what is can you make real progress toward what is to be.

Then you cycle again, using five steps to continuous BTM improvement (see Figure 1.6):

1. Establish a Baseline (assess BTM maturity levels, confirm opportunity areas, identify high-priority functional areas and key stakeholders).
2. Educate and Align (educate key stakeholders on BTM capabilities, review baselines, and develop consensus on roadmap).
3. Diagnose and Design (analyze and define the scope of the problem, identify relevant components of the BTM Framework, design processes, organization, information, and automation).
4. Realize and Mobilize (implement the design with best practice templates, operationalize repeatable decision-making processes).
5. Optimize and Maintain (fine-tune management processes, update information, and ensure decision quality).

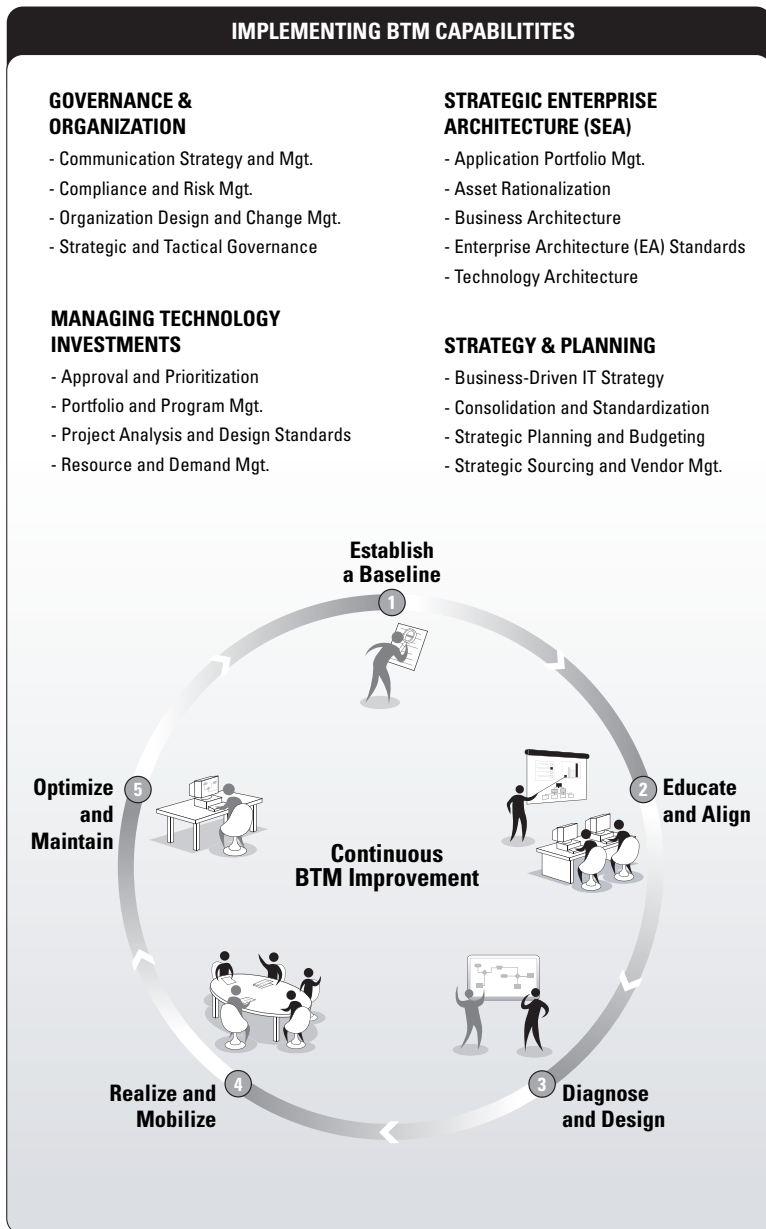
The flexibility of this approach provides multiple points of entry into a BTM roadmap, with or without previous BTM experience. This eliminates any need to completely recast the existing approaches in an organization. BTM maturity initiatives are easily blended with and serve as a supporting framework that can organize and improve existing practices. Incumbent tools and standards for technology management are integrated into the holistic BTM Framework.

The flexible nature of BTM and its implementation cycle easily interfaces with external sources such as compliance studies, management consulting engagement outputs, and audits. Regardless of the source, virtually any baseline or starting point will support the identification of target activities appropriate to an organization's current environment and its state of business and technology synchronization.

As a company approaches the successful conclusion of a BTM improvement cycle, it will be simultaneously planning the evolution of its BTM maturity. This is accomplished by observing results and preparing to establish the next performance baseline. Ultimately, a company operating in the "execution and improvement" zone will seek to revisit their baseline and to determine areas of focus for the next cycle of BTM progress.

Figure 1.6 **A Step-by-Step Approach to BTM**

There are five steps to continuous BTM improvement.



Smart enterprises today are rightfully pursuing alignment of technology with the business, and that in itself is no small achievement. But for some, the right level is really synchronization, where technology shapes (not just enables) strategic choices. And at the highest level of achievement, business and technology leadership actually converges, reflecting an executive and management team that has achieved an extraordinary level of cross-understanding and vision for the future.

The BTM Standard supports enterprises at all three levels. Assembling the components of Business Technology Management as described previously yields unprecedented capacity and opportunity for success in a marketplace where competitive advantage is increasingly defined through technology.

Business technology budgets are so big today that they obviously cannot be ignored by any senior management team. There are those companies with executives who will wring their hands, clamp down with arbitrary spending caps, demand a quick fix such as outsourcing, and call for the head of the CIO. Within a short while, they will cycle through those steps again, since nothing there addresses the core issue: You cannot spend (or slash) your way to business technology excellence and congruence with the business. That demands intelligent application of technology, with spending determined by strategic business needs, not by arbitrary benchmarks.

In fact, there are companies whose executives are beginning to see that business technology investment must be accompanied by appropriate BTM investment. This new kind of capital includes the processes, organizational structures, information and technology required for unified business and technology decision making. This new kind of company will move beyond alignment, where technology supports but never goes beyond immediate business needs, to synchronization and convergence, where technology helps shape new opportunities and in fact cannot be separated from the business.

You had better hope that company is your own, and not your competitor.

