Business Capabilities in Business/IT Alignment and Cultivating the Value of EA, Part I

by Brian H. Cameron

According to economist Michael Porter, more than 80% of organizations do not successfully execute their business strategies. Porter estimates that in 70% of these cases, the reason is not the strategy itself, but bad execution. This failure to execute is the most significant management challenge facing public and private organizations in the 21st century.

According to analyst Michael Krigsman, approximately 75% of IT projects fail outright or fail to achieve the desired business objectives. Given this high failure rate, it is not surprising that a lack of business/IT alignment is often cited as a major contributing factor in poor strategy execution. Is business/IT alignment the holy grail for business and IT executives? We've been striving for better alignment for decades yet most organizations today are no better aligned than they were 20 years ago.

A Google search on “business aligned” turns up many thousands of page matches. But what is business/IT alignment? What would it look like? How do you measure it? Are there different types? Is it possible to be 10% aligned? How about 75% aligned?

This Executive Update, Part I in a series of three, explores (and debunks) the traditional notions of business/IT alignment and offers a more pragmatic approach to keeping IT in sync with business objectives through business capabilities. It also considers the critical role that enterprise architecture (EA) can play in this process.
The Traditional View of Strategic Alignment

Notions of business/IT alignment go back over 20 years. The most famous strategic alignment model is from Henderson and Venkatraman, shown in Figure 1. It is often called the “grandfather” of traditional business/IT alignment thinking.

This model not only suggests that it is possible to directly align business strategy with IT strategy but states that it is imperative to achieve this alignment for the health of the organization. Proponents of the model believe that business and IT may be functionally integrated, but if the external and internal components of IT strategy are out of sync with those of the business, investments in IT do not bring about the intended results. While this may seem to make sense at first, is it really possible to directly align business strategy with IT strategy and keep them aligned?

Porter suggests that fewer than 5% of the people in any given organization actually understand the business strategy. Strategy is not static. The old adage, “No plan survives contact with the enemy,” is very true with business strategy. Strategies are modified as market and execution data changes. In some cases, business strategy may be greatly changed or even abandoned. How can we hope to directly align any part of the organization to something that is ever-changing and when only approximately 5% of the people in the organization understand it?

![Strategic alignment model](image)

Figure 1 — Strategic alignment model by Henderson and Venkatraman.
The Henderson and Venkatraman model typifies the traditional thinking regarding business strategy and IT strategy alignment. This type of traditional alignment thinking places IT in a special place, one that is separate from the rest of the organization (see Figure 2).

![Figure 2 — The business/IT strategy alignment worldview.](Image)

This view of IT and the rest of the “business” assumes that IT is somehow different from the rest of the other functional areas of the organization and is the only area that can be out of alignment. Using language that focuses on “IT alignment with the business” and/or “IT and the business” is damaging, because such language implies that IT stands apart from “the business,” rather than being an integral part of it. A better, and more pragmatic, view is presented in Figure 3.

In the view of the organization and alignment in Figure 3, all functional areas are part of the “business” and all must be in sync with the overall direction of the business.

![Figure 3 — A better worldview.](Image)
A Pragmatic Approach to Alignment

Does alignment really lie with strategy? There is, we hope, a business strategy. That strategy might be to double the focus on core markets, expand into new product areas, buy up smaller widget makers, or just improve customer service. The business vision translates into a strategy (the plan) to achieve it, and eventually all the way down to a daily mission for staff to get behind. If the business strategy is clear enough, it will help in decisions between two competing projects. Given option A and option B to assess, it should be possible to refer to the business strategy and say, “People, we must go with option B because it better supports our XYZ strategy.”

The IT strategy, and all it entails, has to align to the business strategy. Why else have one? This is very hard to do. As we’ve suggested, a business strategy is a fluid thing. No plan survives contact with the enemy. It’s difficult to write a strategy that dictates the direction of things that are expensive and hard to change — like tools, platforms, applications, and architecture — based on the business telling IT that next year the organization is going to leverage key learnings in its core competencies and maximize customer value by augmenting synergy in the value chain. An IT strategy is a seriously weighty thing to put together.

So what’s the frame of reference for the IT strategy — if it’s not the business strategy?

The job of the IT strategy isn’t to align to the business strategy. It’s to give the business people who create it as many options to change tack as possible. It’s a provider of capability. Capability equals competitive advantage when the business strategy is a good one. IT alone cannot save any business, but if it makes those reactive changes just a bit easier and quicker to do, it can have a serious impact on the competitive advantage of the organization.

All of this suggests that direct alignment with business strategy may be a fool’s errand and that we need to change the alignment perspective from that of traditional strategy execution (formulation of business strategy and subsequent implementation of organizational and IT infrastructure) to a more appropriate (and understandable) alternative perspective — a capability-level perspective, for example.

Aligning with core business capabilities is a much more pragmatic approach for transforming IT into a valued, strategic resource for the organization. It is easier to sell that type of strategy and perspective back to the business. Your capabilities can stimulate their ideas. Suddenly IT looks like a platform for opportunity and not just cost. Rather than conversations being about how hard it is to do what people want to do, the door is open for them to do what they didn’t know they could have done. This is difficult to accomplish where IT is merely striving to align with business strategy. In the world of alignment, the customer is the business, and the business is always right. This mindset doesn’t allow the CIO and IT to influence business strategy and help determine which projects have the most business value.
This type of thinking goes beyond traditional strategic alignment exercises. This new perspective requires IT to understand whether there has been an impact on the business. Here are a couple examples of how the way we think and communicate impacts how IT is perceived in the organization:

**Example 1: IT Budgeting Process**

Old thinking: Most of the IT budget (maybe 100%) is spent on sustaining the business.

This leads to the CEO saying, “We’re spending all that money and getting nothing of value.” It produces a utility mindset; IT is viewed as a cost to be managed.

New thinking: Develop a portfolio approach where the budget is allocated between different types of investments (e.g., run the business, grow the business, transform the business).

This leads to IT becoming viewed as a strategic enabler of business capabilities and value (and also often increased expectations). (This concept is the topic of the third Update in this series.)

**Example 2: Value Communication**

Old thinking: Communicate network use, applications supported, projects completed on time, headcount, and so on (how we’re spending money and containing costs).

New thinking: Discuss contribution to sales and how IT has contributed to drive revenue (how we’re contributing to making money). When you focus on metrics that define value, it’s a very different conversation than the one you would normally have about managing costs. (See my Executive Report “Methods for Defining and Analyzing Key EA Performance Metrics.”)

This perspective calls for a clear understanding of core business capabilities and how IT can better support and enhance those capabilities. This way of thinking also requires the IT organization to have a good understanding of how the company is positioned in the marketplace in terms of technology scope, systemic competencies, and IT governance. Traditional IT strategic alignment thinking distracts the IT organization from the real work of understanding and promoting the goals and objectives that matter to the rest of the enterprise. IT’s conversations throughout the enterprise must reflect a focus on business outcomes and business performance.
Capabilities and Digital Transformation

The notion of the IT organization as a provider of capability is of particular importance in this age of digital transformation. Most senior executives today see digital capabilities having at least some impact on overall enterprise results and expect the level of impact to continue or increase in coming years. An organization’s ability to connect digital investments to enterprise key performance indicators (KPIs) and drive alignment with core business capabilities will be strong predictors of success in building digital capabilities.

An example of a digital disrupter today in many organizations is in the area of supply chain management. Digital transformation hinges on the supply chain’s ability to support digital business. These changes have profound impacts on the supply chain focus, goals, and capabilities. Digital reality means increasing capabilities that present the organization with many more opportunities for persistent supplier relationships and customer intimacy. It also presents the supply chain with a myriad of challenges, from exposure to more market volatility to the need to support new business models that go beyond the traditional goal of fulfilling the demand for physical products.

At a time when digital transformation is driving significant change across all industry sectors, it is critical that organizations are able to align functional and cross-functional project activities to their strategic objectives. In the digital economy, the lines between technology, new product development, applications, service delivery, and change management are increasingly blurred, and it’s vital for the business to have an integrated view to effectively manage these initiatives through execution. IT alignment with core business capabilities, often under the direction of EA, provides the pragmatic process needed to achieve these goals.

Alignment with Core Business Capabilities

A capability-level perspective for “alignment” recognizes that the IT organization has little hope of understanding and keeping pace with business strategy. However, the owners of the core business capabilities are in a much better position to understand the business strategy and changes to the overall strategy. Subsequently, core business capabilities are modified to better serve changes in business strategy. New capabilities may be added and capabilities that are no longer needed may be discontinued. By placing the focus on understanding and “aligning” with the needs of the core business capabilities, the IT organization can be transformed from an ineffective cost center to a critical asset for competitive differentiation.

How do we determine which capabilities are core business capabilities? There are many capabilities in a large organization and we should focus on those capabilities that are core to the success of the business so that we can measure and demonstrate the value added. We can use the process described below to help determine which capabilities are core to the organization.
First, let’s define “capability.” A business capability defines the organization’s capacity to successfully perform a unique business activity. The following qualities describe capabilities:

- Are building blocks of the business
- Represent stable business functions
- Are unique and independent from each other
- Are abstracted from the organizational model
- Capture the business’s interests

Figure 4 illustrates how capabilities comprise processes that in turn produce a service or product, using an example of producing a research paper. The research-related capabilities comprise the process of research paper production, which in turn produces the product, a research report.

Figure 4 — The capability/process relationship.
Another way to think about Figure 4 is that processes implement capabilities. An understanding of your core capabilities and the processes that implement those capabilities is very important for all organizations.

Next we visually represent the capabilities. A business capability map is a conceptual model of all the organization’s capabilities, along with the details (people, process, and technology) that enable them. Figure 5 is an example of a capability map for a financial institution.

In many capability mapping exercises, capabilities are divided into categories to better understand the nature and importance of a capability to the organization. Typical capability categories include the following:

- **Advantage capabilities** — directly contribute to the customer value proposition and have a high impact on company financials. Companies keep these inside to protect their intellectual property. Improved methods for data analysis would be an example of an advantage capability. By performing faster and/or more accurate data analysis, a bank or other financial institution may be able to serve its constituents better, cheaper, or faster, and may develop this into an advantage capability.

- **Strategic support capabilities** — have high contribution in direct support of advantage capabilities. These are the operational capabilities that the organization performs on a daily basis. Examples of strategic support capabilities include processing payment and handling inquiries from customers.

![Capability Map](image)

**Figure 5 — Sample capability map.**
- **Essential capabilities** — may not be visible to the customer but contribute to an organization’s business focus and have a big impact on the bottom line. In this area, the focus is on efficiency improvement, especially in high-volume work. Essential capabilities are needed to operate the business, but are also often candidates for outsourcing. Examples might include some accounting functions, HR functions, and many of the “keep the lights on” IT functions.

Figure 6 illustrates a capability map with the capabilities color-coded by category.

Once business capabilities are categorized, they are then prioritized by value to the business. Value to the business is determined by having the leadership of the organization rank the relative value to the organization of identified capabilities. After completing this process, it will become clear which capabilities are most critical to the organization. This is not a one-time event. A governance process must be established to regularly (typically annually) access and understand changes to the capability map and the core business capabilities and determine appropriate changes to the supporting IT capabilities and infrastructure.

Figure 6 — Sample capability map with color-coded categories.
It is highly recommended that you follow the value measurement process outlined in my *Executive Report “Methods for Defining and Analyzing Key EA Performance Metrics.”* This process, originally developed for EA, can easily be applied to IT and other EA-related areas to initiate a value-based discussion with the owners of the core business capacities. By focusing on the key performance metrics that matter to the owners of the core business capabilities, the IT organization is well on its way to becoming a value-added, strategic resource. Enterprise architecture can play a critical role in the mapping of capabilities and in the related value measurement process. The alignment between IT and core business capabilities is paramount in order to achieve the effective execution of business strategy.

**Effective Execution of Business Strategy with EA**

Traditional views of strategy alignment share the perspective of providing guidance and direction within an organization by using a top-down approach, where upper management constructs and devises a strategy for the organization and this strategy is passed “downward” to the operational personnel. Although there is an implied understanding that the information gathered from operations should be used to update and enhance senior management's perspective on the productivity, growth, and health of the organization, there has not been a lot of explicit instruction on how best to facilitate this exchange of communication within an organization. In fact, most traditional alignment models do not address how direction from the top gets translated and put into operational use; instead, the problem is ignored. The lack of a pragmatic approach for linking strategy to execution is a big hole in traditional alignment models.

There are many reasons for the failure of an organization to bring its strategies to life. Escalating complexity and rapid change have made the development and execution of effective strategy increasingly difficult (see *Alignment: Using the Balanced Scorecard to Create Corporate Synergies*). The field of enterprise architecture has rapidly evolved to address these challenges. EA is a well-defined practice for conducting enterprise analysis, design, planning, and implementation, using a holistic approach at all times, for the successful development and execution of strategy. EA applies architecture principles and practices to guide organizations through the business, information, process, and technology changes necessary to execute their strategies. These practices utilize the various aspects of an enterprise to identify, motivate, and achieve these changes.

Enterprise architecture uniquely fosters dialogue to create shared meaning and to deliver shared goals. The primary purpose of describing the architecture of an enterprise is to provide the holistic information and insights to effectively frame the opportunities of the organization and make better informed decisions. With EA, organization leaders can more readily improve the effectiveness, efficiency, and responsiveness of their enterprise. Effective EA is the key to enabling the enterprise to address orders-of-magnitude increases in complexity and orders-of-magnitude increases in the rate of change.

As shown in Figure 7, in many respects, EA professionals are the urban planners for the enterprise.
The term “enterprise architecture” has various uses. In some cases, EA practices may focus on the outputs (“the noun”) rather than the practice of EA. A growing number of EA professionals use the term “enterprise architecture” to refer to a practice (“the verb”) rather than outputs or deliverable artifacts. Practitioners find that focusing on EA as a continuous practice allows EA guidance to evolve in response to the desire for particular business outcomes (see Figure 8). A continuous process provides clarity for the ongoing transformation of an enterprise.
The notion of EA as a continuous process is required to produce the enterprise information needed for the assessment and understanding of changes to the enterprise capability map and core business capabilities that is done as part of an annual governance process associated with the alignment of IT and the core business capabilities. This type of ongoing assessment of core business capabilities is critical to maintaining alignment between IT and the core business capabilities. As outlined earlier, this alignment is a central component in the effective execution of business strategy. As Figure 9 suggests, EA can be an effective bridge between strategy devised by senior management and the tactical execution level of the organization. This view of EA will be the focus of the next Update in this series.

![Figure 9](image)

Figure 9 – EA can be the linchpin to bridge the strategy to execution. (Adapted from *Enterprise Architecture as Strategy* by Jeanne W. Ross, Peter Weill, and David Robertson.)

**Conclusion**

True and effective alignment between business strategy and IT strategy has eluded organizations for many years. This Update suggests several reasons for the failure of direct alignment between business strategy and IT strategy and outlines a more pragmatic approach to alignment and strategy execution with core business capabilities as the alignment focus for IT. Furthermore, the Update outlines the critical role that enterprise architecture can play in this process. Enterprise architecture’s role as a critical bridge between business strategy and tactical execution will be the focus of Part II in this series, followed by Part III, which will explore the critical role that IT project portfolio management plays as a powerful alignment tool.
About the Author

Brian H. Cameron is Strategic Director of the Center for Enterprise Architecture in the College of Information Sciences and Technology at the Pennsylvania State University. Dr. Cameron is also President of the Federation of Enterprise Architecture Professional Organizations (FEAPO). He works with a wide portfolio of companies on a variety of consulting engagements, ranging from systems integration projects to EA planning and design. Through his academic work, Dr. Cameron has consulted with such organizations as Accenture, AT&T Wireless, Avaya, Boeing, EMC Corp, Lockheed Martin, NSA, Oracle, Raytheon, US Marine Corps, and many others.

Dr. Cameron’s primary research and consulting interests include EA value measurement, hybrid EA framework development, enterprise integration, information management and storage, and the use of simulations and gaming in education. The main focus areas for his teaching efforts are on graduate and senior-level capstone EA, enterprise integration, and IT consulting and information architecture courses. Dr. Cameron has designed and taught executive education sessions for senior IT executives on such topics as strategic alignment of IT and business strategies, EA value measurement, adaptive EA, IT governance, IT portfolio management, service-oriented architecture, and business process management.

Dr. Cameron is TOGAF and Zachman certified and has developed an extensive background in the DoDAF, FEAF, and Gartner frameworks. He is an EACOE-certified enterprise architect and serves on the boards and working committees of several international professional organizations and journals. Dr. Cameron is a member of the Professional Education Standards Committee of the International Professional Practice Partnership (IP3), a member of the board of trustees for the Center for the Advancement of the Enterprise Architecture Profession and Business Architecture Guild, co-chair of the Academic Alliance Committee for the Special Interest Group on EA for the Industry Advisory Council of the US federal government, and a member of the editorial review boards for Journal of Enterprise Architecture; International Journal on Cyber Behavior; Psychology and Learning; Interdisciplinary Journal of Information, Knowledge, and Management; Journal of Information Systems Education; and International Journal on E-Learning. He was awarded the NPA Career Achievement Award in 2011 for efforts related to the founding of FEAPO, the building of the Center for Enterprise Architecture, and associated service to the EA profession. He can be reached at bCameron@ist.psu.edu.
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