

The Six Dimensions Of Business And IT Alignment

Improving Business And IT Alignment Has Never Been More Important

Competitive advantage in the pharmaceutical industry depends on a company's ability to transform information and knowledge into FDA-approved commercial products (i.e., drugs). The modern pharmaceutical industry is highly information-intensive and information technology (IT) is a critical enabler for competitive advantage. Without IT, the modern pharmaceutical industry would be impossible. With such high interdependence between business and IT required to generate new knowledge and new products, harmonization of business and IT goals are essential to meaningfully enhance a pharmaceutical company's competitive position.

The harmonization of business and IT goals is commonly referred to as "strategic alignment" and its importance — documented since the 1970s — is that strategic

alignment enhances the likelihood that a transformational business strategy will be successful.

Responding to Industry Challenges

In my recent discussions with pharmaceutical executives, the topic of improving alignment between business and IT has assumed new importance as threats to the pharmaceutical industry's sustainable double-digit profitability have multiplied (e.g., genetic-based therapeutics vs. chemistry-based therapeutics, declining R&D productivity, escalating drug development costs, increased competition due to globalization and competitive alliances, heightened M&A activity, etc.) and the requirement to control or reduce operational costs has become paramount. The business side of the

industry is responding to these challenges by undertaking or exploring strategies to transform current business processes and the way information is shared, created, stored, and used. For example:

- Employing "personalized medicine," which includes therapeutics that are tailored to an individual's specific phenotype (individual physical characteristics including organs, metabolism, etc., resulting from genetics). This transformational strategy would move the entire industry away from mass-produced therapeutics that act on entire populations to therapeutics customized to individual patients (i.e., from a mass production business model to mass customization).
- Changing the current business model for

obtaining approval to market new therapeutics. This includes a change from filing individual applications, often many months apart, with the separate regional regulatory agencies (FDA, EU's EMEA, Japan's MHLW), to a model where these filings are done almost simultaneously in all regions. A global submissions model would enable pharmaceutical firms to more quickly generate revenue from products as well as enjoy longer periods of market exclusivity for their products.

- Forming alliances with other firms, including competitors, to share the cost of research and development, and being able to routinely and cost-effectively dissolve these alliances in order not to disrupt current operations.

Each of these transformational business strategies will demand a high degree of strategic alignment among the business and IT functions of the company. However, an alarming fact according to recent industry research is that while more than 80 percent of companies employ some form of strategic business and IT planning, less than 10 percent of these strategies achieve their objectives.

"If strategic alignment is so important to the business and IT function, why is the execution strategy so dismal?"

— Elby Nash

Why this huge disconnect? If strategic alignment is so important to the business and to the IT function, why is the execution of strategy so dismal? The principal reason for the strategy formulation-execution gap is that certain factors related to organizational structure and organizational behavior enable or inhibit the ability of a company to achieve strategic alignment.

The Strategic Alignment Maturity Model

In order to maximize strategic alignment, pharmaceutical companies need some objective way of evaluating their current status. I believe that pharmaceutical organizations can determine their current state of strategic alignment - and their potential for business transformation - by using a five-level framework called the "Strategic Alignment Maturity Model," which is highlighted below:

1. Initial/Ad Hoc Process - business and

IT are not aligned or harmonized

2. Committed Process - the organization has committed to becoming aligned

3. Established Focused Process - there are established processes (such as a systems steering committee), and activities (such as portfolio management capabilities to evaluate IT investments) to realize strategic alignment

4. Improved/Managed Process - IT applications are leveraged across the enterprise to drive process enhancements that sustain competitive advantage

5. Optimized Process - the organization has integrated business and IT strategic planning

Level 1 companies generally lack the processes and communication between business and the IT functions needed to attain strategic alignment. Within Level 5 companies, IT and other business functions integrate their strategies using fully developed processes that include external partners and

customers. Therefore, the higher the maturity level of strategic alignment, the higher the likelihood that a transformational strategy will be successful.

Six Management Practices

This sounds good, but how can we quantitatively determine which level might describe a company's current state of strategic alignment? The answer is that each level can be determined by evaluating six management practices that extensive research has shown enable—or inhibit—strategic alignment:

1. *Communications Maturity* - practices that encourage knowledge sharing across the business and IT organizational communities
2. *Competency/Value Measurement Maturity* - practices that demonstrate the business value of IT
3. *Governance Maturity* - practices that ensure that the business and IT communities formally discuss and review the priorities and allocation of IT resources
4. *Partnership Maturity* - practices that address how the business and IT communities perceive the contribution of the other, as well as the level of trust between the communities and how risks and rewards are shared
5. *Scope & Architecture Maturity* - practices that address the extent to which IT is able to:

- * Move from the “back office” to the “front office”
- * Design and implement IT infrastructures that are flexible and ensure transparency to internal and external customers
- * Effectively evaluate and apply emerging technologies to address current and potential business needs
- * Drive or enable changes to business processes for competitive advantage
- * Provide solutions that are customizable for each customer
- 6. *Skills Maturity* - practices beyond traditional HR activities that enhance and reward skills that align business and IT objectives

Next Steps

Against this theoretical background, two key questions arise:

- * How can understanding these concepts help make my company, or a division within it, better able to develop a transformational strategy that is enabled by IT?
- * What next steps should I consider to help clarify where my company falls on this scale of transformational potential?

As a first step I recommend that you evaluate your organization at the divisional level rather than the enterprise level, using the summary descriptions of the five levels of Strategic Alignment

Maturity Model (illustrated below). This provides help in understanding where your organization might be positioned in its transformational potential. The importance of this evaluation is not in the absolute number (i.e., 1-5) but in what the number implies about your organization's likelihood of achieving a successful transformational strategy. To more deeply understand and close the specific gaps in each of the six dimensions of alignment maturity (i.e., critical management practices), we have helped clients implement a more detailed assessment of senior business and IT management. This involves completing a survey questionnaire that more extensively explores each of the six dimensions and then holding a follow-up joint workshop.

Summary Descriptions: The Strategic Alignment Maturity Model

LEVEL 1 - Initial/ad-hoc processes

This is the lowest level of Strategic Alignment. Organizations at this level generally have poor communication between business and the IT function and poor understanding of the value each provides. Relationships between business and IT tend to be rigid and formal, with few opportunities to share knowledge and information. Metrics tend to be technically oriented rather than business oriented, and service level agreements or benchmarking practices are sporadic. Power resides with the business and the style of management tends to be authoritarian and hierarchy-conscious.

Strategic business planning or IT planning tends to be ad-hoc and IT typically has no role in strategic business planning. IT is viewed as a cost center and reactive (“order takers”) to requests for service from the business. Spending on IT tends to be viewed by the business as a “cost of doing business”. The CIO (if one exists) may report to the CFO. IT organizational structures at Level 1 tend to be decentralized.

The level of trust and partnership between business and IT at this level is minimal and may be marred by conflict. The IT organization tends to take risks with little prospect of reward or recognition by the business. Business sponsorship of IT projects is rare. There is little to no career crossover between business and IT, and technical skills tend to dominate the IT staff. The overall organization tends to be resistant to change.

Technology architecture tends to be inflexible, with little to no integration between components. Technology standards tend not to be present at the enterprise level or ad-hoc at the business unit level.

LEVEL 2 - committed processes

Organizations at this level are committed to begin the processes needed for Strategic Alignment. This level tends to be focused on specific functions or organizations within the company (e.g., R&D, Manufacturing, Marketing, etc.) or specific geographical locations (e.g., U.S., Europe, Asia, etc.). Because the focus is on “local” organizations, alignment tends to be difficult to achieve because of limited awareness about what each local organization is doing.

In general, any business-IT alignment at the local level is not leveraged by the enterprise. The potential opportunities offered to the enterprise by local business-IT alignment are, however, beginning to be recognized.

Organizations at this level generally have gained some limited understanding between business and the IT function of each other's role. Relationships between business and IT have become relaxed at some limited levels, with some opportunities to share knowledge and information. IT metrics tend to be cost oriented, but are still not linked to business metrics. Service level agreements are technically oriented and benchmarking is still informal. There are few continuous improvement programs. The management style tends to be transactional rather than partnership.

Business and IT planning in Level 2 organizations is tactically focused and tends to be done at the functional level. IT is emerging as an asset, and the prioritization process for projects is occasionally responsive. IT Steering Committees have emerged at the functional level and meet periodically. Spending on IT tends to be focused on issues related to operations. The CIO typically reports to the CFO in a Level 2 organization. IT organizational structures at Level 2 tend to have decentralized and centralized characteristics, with centralization of some shared services.

Relationships in a Level 2 organization are principally transactional. The IT organization takes most of the risk with little reward. Business sponsorship of IT projects is limited, even at the local level. There is some career crossover between business and IT at the functional organizational level, with technical skills being most important to IT. Change readiness depends on functional unit management and leadership.

Technology standards and architecture have begun to be defined at the enterprise level with some early attempts at cross-functional integration. There is limited architectural flexibility at this Level.

LEVEL 3 -

established focused process
Organizations at this level concentrate decision-making (governance), communi-

“Strategic business and IT planning is a managed process across the enterprise.”

— Elly Nasfi

cially oriented with some emerging attempts at linkage between technology metrics and business metrics. Service level agreements or benchmarking practices are starting to emerge across the enterprise, although results are not always shared. Continuous improvement programs have emerged at the business unit level that focus on key processes. The management style tends to be consensus-based, with the locus of power becoming more cross-organizational.

Strategic planning tends to be done at the business unit level and some inter-organizational planning has emerged. IT is increasingly viewed by the business as an asset, although the prioritization process for projects still tends to be responsive. Formal IT Steering Committees have emerged and meet regularly. Spending on IT tends to be controlled by budgets and IT is seen as a cost center, but there is an emerging awareness of the “investment potential” of IT. The CIO may report to the COO in a Level 3 organization. IT organizations at Level 3 tend to show some centralized and decentralized characteristics with some evidence of federation.

The level of trust and partnership between business and IT at this level has grown to where business views IT as an emerging valued service provider. Business is more tolerant of risk and is willing to share some risk with the IT organization. Business sponsorship of IT

projects is at the local level. Career crossover between business and IT is at the functional organizational level, while business and technical skills are important to business and IT.

Technology architecture tends to be integrated for key processes across functional organizations. Enterprise technology standards and architecture have emerged at the enterprise level and with key external partners.

LEVEL 4 -

improved/managed process

Organizations at this level have demonstrated the ability to manage the processes needed for Strategic Alignment. This level of Strategic

Alignment Maturity demonstrates effective decision-making and services that reinforce the concept of IT as a value center and as driver or enabler of change. Organizations at Level 4 leverage IT assets on an enterprise-wide basis and the focus of applications systems is on driving business process enhancements to obtain sustainable competitive advantage.

IT's understanding of the business is pervasive; while business has become aware of IT's business potential. Relationships between business and IT have become relaxed and informal, with institutionalized knowledge sharing a common practice. Business and IT metrics are linked. Service level agreements are enterprise-wide and benchmarking is a routine practice. Continuous improvement is frequently practiced. The management style is now focused on results or profits, with a cross-organizational locus of power.

Strategic business and IT planning is a managed process across the enterprise. IT is viewed by the business as a driver or enabler of change, and the prioritization process for projects is now responsive and focused on adding business value.

Formal IT Steering Committees meet regularly and are effective. Spending on IT is investment focused. The CIO may report to the COO or the CEO in a Level 4 organization, with the IT organization structure tending to be federal.

The business now views IT as a valued service provider, with business willing to share risk and reward with the IT organization. Business sponsorship of IT projects is at the local level. Career crossover between business and IT is at the functional organizational level, while business and technical skills are important to business and IT.

Technology standards and architecture are operational at the enterprise level and with key external partners.

LEVEL 5 - optimized process

Organizations at this level have optimized Strategic Alignment of business and IT through governance processes that support and sustain the integration

of strategic business planning and IT planning. Organizations at Level 5 consciously leverage IT assets on an enterprise-wide basis to extend their reach to encompass external customers' and suppliers' supply chains. It is sometimes difficult to determine whether a Level 5 organization is more a technology company than it is a pharmaceutical or biotechnology company.

Understanding of business and IT is mutually pervasive. Relationships between business and IT are informal, and knowledge sharing is now practiced with external partners. Business and IT metrics are now extended to external partners. Service level agreements are now extended to external partners and benchmarking routinely performed with these partners. Continuous improvement is routine. The management style in Level 5 companies is based on relationships, with power residing in all executives - including the CIO.

Strategic business and IT planning in Level 5 organizations is integrated across the enterprise as well as outside the enterprise. IT is viewed by the business as co-adaptive and as a profit/value center. The prioritization process for projects is fully responsive and focused on adding business value. Steering Committees function as partnerships. Spending on IT is focused on obtaining business value and on extending that value to external partners. The CIO typically reports to the CEO in a Level 5 organization, with the IT organization structure tending to be federal.

Business views IT as a valued business partner, with business and IT sharing risks and rewards. Business sponsorship of IT projects is at the CEO level. Career crossover between business and IT is routine across the enterprise, while business and technical skills are highly valued to business and IT. The organization is highly focused on change and ready for it. Technology standards and architecture are operational at the inter-enterprise level and exhibit a high degree of flexibility and scalability. Technology architecture evolves with the company's external partners.

In order for pharmaceutical companies to survive and thrive in today's competitive environment, being aware of their current state of strategic alignment is critical. I believe that using the Strategic Alignment Maturity Model offers one of the best ways to realize that goal.

— *By Elby Nash, Fujitsu Consulting*
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