

Chapter 11

Lean IT Service Management

Understanding and Navigating the Cultural Silos of IT Value Streams

Troy DuMoulin

Fundamentally the information technology (IT) function's reason for existence and right to ongoing funding is based on successfully performing the duties of a trusted service provider. As such, IT is charged with delivering outcomes customers want, value, and for which they are willing to pay. However, being a service provider does not make IT unique, distinct, or special within a business context. In a typical business, there are many support functions, such as human resources (HR), fleet management, facilities management, engineering, finance, accounting, and so on. Each of these support functions plays a key role (1) as a service provider to the line of business customers, (2) in external market value generation, and (3) in the larger business ecosystem. They all provide important services that are necessary for the overall business organization to grow and meet changing market demands.

At least this is how an academic or business school professor would describe IT's relationship with business. The challenge is that reality does not often reflect this textbook and even logical perspective. From experience, most readers will observe that the cultural reality is much more complex, disjointed, and often dysfunctional.

If you ask most business stakeholders if they believe IT understands their priorities and challenges, you will hear a uniform "no." In turn, the IT members will often see themselves as unique with separate goals (although

somehow aligned) from the business customers they serve. This cultural perception of separation and distinction is not a one-sided view but is shared by the business units themselves. They often hold to the profound belief that IT is not part of the core business competency.

The fallacy of both views is that it would be difficult, if not impossible, in a twenty-first-century organization to identify a single major business process that is not highly automated if not completely dependent upon digital outputs. Information systems have in effect become as much a part of the business process as older technologies that have long been taken for granted. Information systems are not “nice-to-have” technologies but are simply part of the line or business value system. Point being: Business outcomes are wholly dependent on information technology and are very much part of the business core competency.

The false perception of separation represents a cultural gap that makes process improvement across business units and IT groups very difficult. To accurately map and improve a cross-functional value stream, it is important that all stakeholders involved in the improvement activities participate both willingly and in agreement on a shared goal. Effective value stream mapping depends upon understanding the linkage of the *who*, *what*, *when*, *where*, and *how* those goals are accomplished. For most business processes, the *how* is automated within information systems supported by digital data stores.

Attempting effective business value stream improvements without this acknowledgement and cultural acceptance is problematic at best and disastrous in a worst-case scenario.

As an interesting anecdotal example of business and IT separation, I once delivered a presentation on IT management best practices to a large-city transit authority. In attendance was a mixed audience. A number of the attendees were from the internal IT department, reporting up to the CIO. These attendees understood themselves to be part of the IT organization with such titles as network administrator, server administrator, database manager, and so on. This group of people spent their days focused on optimizing and managing networks, applications, and servers. In the same room was a group of people who reported to a business unit. These individuals were responsible for the systems related to scheduling and operating the trains and buses. However, they also managed their own separate networks, vendor-supplied applications, servers, databases, and so on, all outside the management and oversight of the IT function and the CIO. The business group had titles such as engineer, analyst, and scheduler and saw themselves

as the business and the customer of the CIO organization. Both groups managed technology that automated the trains and bus transportation system. These two groups depended upon one other in regard to technology and data integration but did not share processes or priorities. One group thought of itself as IT and the other as the business.

- The question is which of the two groups had the more accurate view of its role within the business? (The CIO's group was in the business of technology management; the other was in the business of mass transit.)
- What risks does the lack of integrated management practices across the two groups managing interdependent technology systems pose to the business—not to mention the public using the transit systems?
- What impact does this perception of separation have on mapping and improving value streams that depend upon the participation of both groups?

In actual fact, the reality of artificial separation based on culture and organizational design goes much deeper than business and IT separation. Within the IT function itself groups are typically culturally fractured along technology lines—one of the most pronounced being the cultural divide separating development groups from operations. These separations and sometimes antagonistic relationships also challenge the improvement of value stream and IT management processes, which span departmental silos.

Understanding and working within this cultural maze rather than ignoring its existence is a critical success factor in applying Lean improvement principles to IT management processes.

To explore this topic fully this chapter will work through the following structure:

1. *Organizational separation*: What is it, and why is it a problem especially for Lean improvement projects?
2. *Two underlying causes of separation*: Organizational structural issues and cultural barriers.
3. *IT cultural maturity model*: A way to assess the organization's readiness for value stream improvement.
4. Practical advice on applying the model to support Lean improvement objectives.

IT Services and Underpinning Management Systems

The IT function is a service provider that receives demand for and delivers a variety of technical and professional services to support ongoing business needs. Underpinning this macro demand-supply value stream is an IT management system of interdependent and organizationally agnostic processes.

The IT management system in effect supports and underpins the basic enterprise IT value stream flow of demand → plan → build → run (DPBR) based on business requirements.

This generic value stream is defined and documented by various IT management frameworks such as The Information Technology Infrastructure Library (ITIL) and Control Objectives for Information and Related Technology (COBIT). Both frameworks use slightly different terms and provide different levels of detail for different goals, but the basic value stream is the same. For example:

- **ITIL** – service strategy, service design, service transition, service operation, continual service improvement
- **COBIT** – plan and organize, acquire and implement, deliver and support, monitor and evaluate

These two examples represent IT management frameworks that focus on the full DPBR value stream. It is useful to understand that there are also other frameworks that have a narrower but deeper focus on specific practice areas. For example:

- Capability Maturity Model Integrated (CMMi) for software development lifecycle management
- The Open Group Architecture Framework (TOGAF) for IT systems architecture
- Projects In Controlled Environments (Prince2) for project management
- Project Management Body of Knowledge (PMBOK) for project management

For the most part, technology functions understand and execute the various individual steps of this value stream with some degree of success or maturity (and suboptimization). The challenge and risk of the enterprise IT value stream is in the handoffs between these steps across the full DPBR value stream. For example:

1. Not understanding demand causes IT to deliver services that do not meet business needs.
2. Having limited-to-no input from demand into plan is a recipe for not getting the service design specifications correct.
3. Not understanding the plan or design specifications causes confusion in the identification of acceptance criteria for the building, testing, and promotion to production tasks.
4. Having nonaligned, poorly designed, insufficiently tested, and ill-coordinated service elements being introduced to the run/production environment delivers service outcomes that are unreliable and do not meet business needs.

The perception of separation discussed in this chapter is sometimes referred to as “silo mentality” and is by no means unique to IT functions but can trace its roots to early industrial organization design models focused on task specialization.

Since the early industrial revolution and the advent of modern manufacturing processes pioneered by men such as Henry Ford, organizational design has focused on breaking apart complex processes and value streams into the smallest individual tasks. One important reason for this approach was that at the turn of the last century the general workforce lacked highly skilled resources because most employees had recently moved from a rural cottage industry to an industrial model. In addition to the skills shortage, early industry was faced with severe challenges around general communication and collaboration tools. This created a need to simplify each person’s task down to a set of focused and repeated activities.

However, still requiring the ability to maintain a larger picture of the entire process, the organization created a foreman or manager position to oversee a small set of related tasks performed by individuals, and then a middle manager to supervise that foreman and his related peers. Following this model, a senior manager was needed to oversee a set of middle managers that managed similar teams. The resulting organization was comprised of large vertically oriented management pyramids or silos focused on groups of like activities where communication was relatively efficient vertically through the pyramid but was extremely challenging when collaboration was required between silos. This management structure of task segmentation coupled with the need to create layers of management roles to hold the big picture together was the only practical way to accomplish large and complex

objectives with the limitations facing the early industrial age. Thus was born our modern-day organizational design.

The unfortunate and undesirable cultural effect of this structure is to give individuals the false belief that they only have one task or specialty area with which to be concerned. This focus on task specialization and the typical supporting measurement and reward systems encourage individuals and groups to ignore the context or goals of the greater value system. For example, your job is to put brake pedals on the cars as they move past; you will do this as efficiently and as quickly as possible; this is what you are paid to do, nothing else; anything you do outside this task is someone else's job. These management structures are still used today, even though many of the reasons for their creation no longer apply.

In an IT context, this translates into management silos that are created around like-technology domains or platforms such as servers, databases, or applications. Today in IT you can see the culture of task segmentation clearly when the individuals in these entrenched silos, such as network administrators or application developers, believe fervently that they are doing the service desk a favor if they fix something. In their minds, responding to incidents is someone else's job. The inherent problem with task segmentation is that—by the very act of breaking down the complex processes into individual tasks or activities—those who perform the individual tasks do not always understand and accept their role in the overall picture.

We have lost sight of the forest by focusing on the trees!

The base premise of organizational design and corresponding HR job descriptions based solely on task specialization is that there is often an accompanying belief that by improving or optimizing each task the overall system will benefit. However, from the research and writings of Eli Goldratt on the theory of constraints (TOC), we know that no complex system or process can be more efficient than its limiting constraint or bottleneck.

So with this principle in mind it is critical to map out the entire DPBR flow of IT value creation to understand its limitations and constraints.

One of the critical success factors and deliverables that an IT organization must put in place to successfully battle a silo culture is the documentation and communication of the processes within the DPBR value stream. Process documentation is a tool or enabler to Lean goals but not the goal itself. By documenting and gaining agreement on expectations of policy, activities,

and roles within the value flow, you remove ambiguity and subjectivity from improvement discussions

In this context, the IT function is like any factory where orders for goods and services are translated into results our customers want and for which they are willing to pay. The speed with which we translate capabilities and resources into customer value or in TOC terms “throughput” is also a key contributor to customer satisfaction. However, to improve throughput and speed it is critical to understand, map, and manage the flow of value from demand to supply—not just the individual activities. A successful service provider needs to manage how demand for a service (or product) is received and the means by which it assures that the services are designed according to specification and delivered into a stable operations environment.

The factory metaphor runs counter to the popular IT self-image. IT professionals often take issue with the concept of thinking of themselves in terms of a demand-based supply chain. Instead they prefer to focus on the role of research and development (R&D): running projects and developing software. Although R&D is certainly one aspect of the IT value stream (D, **plan, build**, R), it only produces the potential for value. The value of the project or new software is only fully realized when it is transitioned successfully into a stable and well-managed RUN environment.

So in that context, it is critical to IT’s provider mandate that we need to understand the full sequence of processes for turning demand into valued outcomes. This means that we need to intimately understand and map the flow of work on the shop floor regardless of which functions or suppliers are performing the interdependent tasks.

To be successful at this objective, IT staff need to understand and accept their part in the macro process flows that tie together their specific capability areas as they relate to customer relations (demand), pipeline management (plan, build), operations (run), continual improvement, and governance activities.

This macro process model of the IT shop floor is often called an “operating model,” and its definition and management are essential to plan, manage, and tune the flow of productivity through the enterprise DPBR IT value stream. In fact, referring again to the theory of constraints, understanding the full management system in terms of inventory, throughput, and cost is a critical step in determining the location of bottlenecks and applying Lean thinking to continual service improvement.

Operating Model Definition

An IT organization’s operating model and its defined list of corresponding capabilities, objectives, and measures are an extension and deliverable of the IT governance’s task of “Direct, Monitor and Evaluate,” as described by ISO 38500. IT governance is responsible for (defining, establishing, and measuring) the enterprise IT (vision, strategy, policies, organizational structures, and capabilities) required to support business value generation and corporate governance requirements.

An operating model is also a logical representation or blueprint of the IT value stream architecture (Figure 11.1), and it is agnostic insofar as existing organizational structure and sourcing strategies are concerned. The operating model provides a framework to identify and define the major activities, capabilities, process dependencies, and critical success factors required to directly or indirectly convert customer requirements or requests into the expected service outcomes or deliverables.

The operating model initially provides an agreed framework against which to conduct a baseline gap assessment to determine which value stream activities should be a priority for Lean improvement projects.

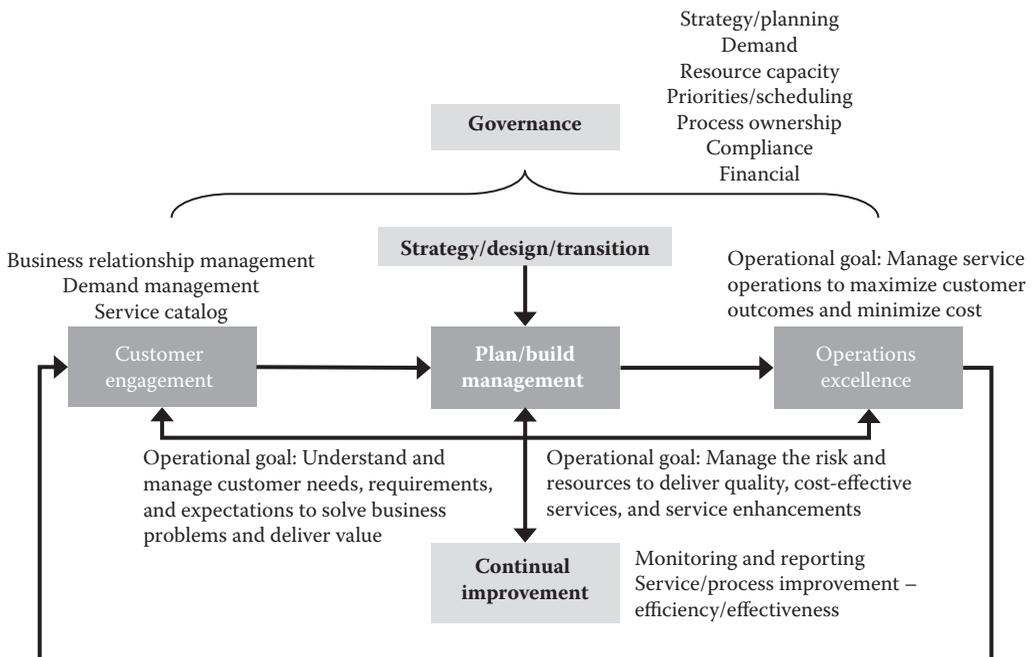


Figure 11.1 High-level operating model.

Outputs of the initial operating model assessment support management decisions related to the following:

1. Organizational structure, governance, and process ownership
2. Enterprise process/capability improvement prioritization
3. Creation of management dashboards and key performance indicators
4. Sourcing strategy
5. IT management tool and automation requirements

The operating model provides the basis for Lean value stream mapping and continual service improvement and is reviewed and adjusted as required.

The purpose of a clearly defined operating model can be summarized by the following assumptions:

- What is defined can be controlled and stabilized.
- What is stabilized can be measured accurately.
- What is measured accurately can be quantifiably improved.

Knowledge versus Acceptance

In the previous section we made the case for *understanding* the end-to-end DPBR value stream as a key dependency for Lean thinking at an enterprise IT or system level. Although it is true that to define is the basis for what can be controlled, measured, or improved, it is also true that the people involved in the full DPBR value stream have to *accept* that they are part of a larger system if they are expected to behave differently over the long term.

In fact, perhaps the most difficult constraint to overcome is the emotional acceptance of their roles beyond their specific specializations. For example, IT management frameworks such as ITIL and standards such as ISO 20000 have been around for two decades. However, it could be argued that global adoption has been limited. Is this the fault of the framework or the cultural readiness of IT to embrace or adopt the necessary cultural and process changes? And is the resistance to adoption an organizational or individual challenge?

Perhaps the most difficult constraint at play is not the head (understand) but the heart (accept). Professor John Kotter from the Harvard Business School describes the importance of the heart or emotional

acceptance of change in his book *Leading Change*. Change efforts in their simplest form focus on the individual through education and awareness. Although one can improve knowledge of the larger change context, education and training alone do not assure final acceptance by those individuals or groups who must change how they work every day in order to achieve the desired end result, especially if there is no consequence for their noncompliance.

In essence, the first and most important step in a value stream improvement project is to reach the heart of the matter and to gain acceptance for the transformation goals. Changing attitudes, behaviors, and eventually culture starts with an understanding of the current state of mind/heart of those who will have to participate in and are affected by the change. In essence, to address value stream improvements across departments, individuals managing applications, servers, network devices, or databases must believe in and see the need for change. As a group they must share and value the broader goals that reside outside their silos and specialized task areas.

The silo mentality is further institutionalized by the fact that most HR job descriptions are limited to the activities and measurements related to an individual's specific functional area. Very few organizations have the insight to include in HR job documentation the expectations and measurements related to an individual's accountability and execution of the IT value stream processes that extend beyond a specific department or functional area. In other words, the concept of separation is built into the description of the roles and responsibilities used to guide and measure individual performance.

If you agree with the old saying that you “manage what you measure,” then continuing to limit the focus of measurement on task specialization is a key contributor to the culture of silo or tribal mentality and a key constraint to value stream improvement. Measures must be aligned to focus on both individual and team behavior that drives desired outcomes.

Accepting a Common Management System

Because the culture of separation and its institutionalization by prevailing organizational structures and measurement systems can be strong, it becomes critical for the reader to understand the cultural context in which you are making changes.

Gaining the emotional agreement of the various groups (both business and IT) that a common management system is a base requirement for optimizing the DPBR value stream is often the first and most difficult task. Many companies that have invested significant time, energy, and resources in process improvement and costly automation have failed to realize any significant value from their efforts because of the inevitable collision with the hidden iceberg of culture, with resistance to change floating below the surface.

IT management frameworks such as ITIL, COBIT, CMMi, and TOGAF provide good practice descriptions. However, these frameworks only provide a definition of what can be achieved if they are introduced into a receptive environment. They do not in and of themselves create that environment.

IT Organization Culture Model

In this section I will present a cultural model that identifies the various shifts in belief and behavior that affect how IT sees its role within a business context and how those changes enable or block an organization's willingness to share a common goal and participate in cross-functional value stream activities.

The cultural model shown in [Figure 11.2](#) is based on a model first published as part of ITIL's Planning to Implement Service Management.¹ This model represents how IT organizations evolve in both the perception of the IT purpose and their relationship to generating business value.

The key premise of this model is that IT strategy, governance, organizational structures, and measures change as organizations evolve from one maturity level to the next. The evolution is manifested in changes to the IT organizational role and the relationship to the overall business value stream introduced earlier in the chapter. The model progresses through the following stages:

1. Technology and project management focus
2. System and service management focus
3. Supplier/business customer focus
4. Business partner focus
5. Business value stream focus

Each of these levels has distinct characteristics in how IT views the following concepts:



<p>External customer-focused</p> <p>External market flow</p>	<ul style="list-style-type: none"> • Business revenue directly generated by the sale of IT services to external customers • IT-based services and their digital transactions perceived to be integral and synonymous with the business processes they support • Market share and stock price influenced by the market's perception of the quality and stability of IT capability
<p>Business partner-focused</p> <p>Business process flow</p>	<ul style="list-style-type: none"> • IT executives part of the strategic business-planning processes • The CIO has oversight and responsibility for other departments outside of traditional IT functions (e.g., facilities, processing, fleet management) • IT measures its success in terms of business transactional volume/availability
<p>Business customer-focused</p> <p>Enterprise IT flow</p>	<ul style="list-style-type: none"> • IT services are understood to support the business process • The IT organization is understood to be an enterprise function made up of both internal and external suppliers using common processes and tools • Enterprise governance mature enough to enforce standards across all IT groups • IT taking and fulfilling orders from its business customer
<p>System/service-focused</p> <p>Application vs. infrastructure flow</p>	<ul style="list-style-type: none"> • Shared services organizations establishing common services, tools, and processes • Service-level agreements based on services rather than technology • IT services typically defined as infrastructure- and user-based services
<p>Technology-focused</p> <p>Departmental flow</p>	<ul style="list-style-type: none"> • IT domains/departments (database, servers, desktop, etc.) • IT operations • Infrastructure organizations • Network

Figure 11.2 IT cultural model. (From Pink Elephant. With permission.)

1. *Value stream orientation*: Which processes or activities are deemed to be within the organization's scope or area of accountability and responsibility?
2. *Customer orientation*: Who does the IT function look to as its primary customer group and the focus of its value delivery?
3. *Measurement orientation*: Which measures will the IT group likely capture and use for management and improvement?

Level 1—Technology Focus

A technology-focused organization can be described as an IT function whose primary goal is the optimization of technology domains with a focus on performance and cost reduction. Each IT functional group (e.g., network engineering, help desk, application development) within its domain looks for ways to improve performance and technical throughput within its specific technology area and with an intense focus on cost reduction. The various functional groups conceptually understand that they don't manage independent technologies, but the reality is that decisions are made and priorities are decided by each group based on departmental goals.

Value Stream Orientation

IT processes are for the most part limited in scope to functional groups and primarily focus on technology tasks such as backup and restore, develop application, or new account setup. Management processes will often be unique to each technical group, which causes duplication of process functions and tools, e.g., multiple help desks based on geographic regions or technology types.

Customer Orientation

The concept of customer is vague and poorly defined. For the most part, a customer orientation is not a major concern at this level of the model.

Measurement Orientation

Measurement is focused on technology metrics such as storage capacity, CPU utilization, database performance, lines of code written, and domain-based cost reduction.

TECHNOLOGY SILOS

Quick improvements at this level will need to be focused at a functional or departmental scope. Time and effort are required to implement a management of change strategy to build awareness and acceptance of service and process involvement across silos.

From an ITIL perspective, the lack of system/service orientation limits the organization to improvements of basic support processes related to the service desk, such as incident management, asset management, and rudimentary change control, monitoring, and event management; these are performed at a device and application level with little to no understanding related to business impact.

Cross-functional improvements at this level will typically mean removing redundant processes and tools in favor of commonality across the organizational scope of the Lean improvement.

Level 2—System-/Service-Focused

Eventually, the risk, cost, and frustration of managing interdependent technology silos as independent groups becomes apparent, and the IT

organization realizes the need for and makes the effort to develop shared management processes to support coordinated service delivery. Before an organization begins to think in terms of business outcomes, it must understand and manage systems, which are an integrated composite that consists of one or more of the processes, hardware, software, facilities, and people that provide a capability to satisfy a stated need or objective.

In other words, members of the IT organization begin to understand the need to manage technology solutions such as the SAP System or the MS Exchange System as a logical entity, which is made up of technology components from across multiple domains. System thinking is typically observed as each domain-based group captures and manages data about key technology relationships and other technology domains. For example, a server spreadsheet will have a new column added to track installed applications on each server.

A focus on the availability of business critical applications such as e-mail or enterprise resource planning applications are often a prime driver for managing system relationships. In these cases, business risk and regulatory requirements often dictate the need to understand and manage relational dependencies of the key technical and contractual objects that together deliver the full technology solution.

At this maturity level, infrastructure groups and data centers are often consolidated into the creation of a shared services/operation group. The structure of application groups can be much more varied in their organizational placement. Although it is common for there to be a single development function, it is also increasingly common to see development groups being managed and funded by business units outside the direct governance of the CIO (such as the transit authority case at the beginning of this chapter).

As a typical second phase of this cultural maturity level, various IT functions start to aggregate and to include related IT systems into service descriptions based on the business or IT outcome they deliver. For example, a shared infrastructure group will define collections of systems based on what they collectively accomplish or what business processes they support. Examples include collaboration, communication and messaging, desktop automation, and hosting services. Major business application groups begin to define the application-centric systems in terms of their business outcome: power generation, logistics, refining, online trading, and so forth. This grouping and naming of IT services, based on business outcomes, is the beginning of the group's cultural focus on service orientation.

Value Stream Orientation

With the beginning of system and service thinking, IT groups are willing to acknowledge and invest time in value stream and process improvements across functional groups. Examples of this are the consolidation of multiple help desks and the establishment of a common service desk that supports the incident and problem management processes across various IT groups or customer areas. Another example would be the adoption of a common change control and scheduling process across applications and infrastructure domains.

Customer Orientation

With the evolution of a larger system and service mindset, the concept of a customer begins to take definition and shape and requires a change in management focus. At a Level 2 of maturity, however, the customer focus is often not yet at a business unit level. Instead, typically the customer is another IT group or end user. For example, an infrastructure group focuses on providing hosting services to an application development function or the delivery of end-user services such as telephony and desktop automation.

Measurement Orientation

Building on technical and cost data, measurement now begins to take on a system and service aspect by looking at customer experience such as application availability/performance and the return on investment of business systems or technologies. A key focus of process metrics is on the results of technical support and change management.

APPLICATION VERSUS INFRASTRUCTURE

At Level 2 in the five-step maturity model, there is an openness to develop processes within those parts of the organization that are under a common management and organizational structure. In many cases, process frameworks such as ITIL are introduced by the infrastructure or operations group but are resisted by the application development group. This resistance often stems from the belief that the development group is distinct and different from the infrastructure organization and that the same processes do not apply.

Scope discussions at this level should take into account the willing participation (or the lack thereof) among the development and applications groups based on their perceived unity or separation with the infrastructure side of the organization.

ITIL processes that depend upon service definition such as service catalog, service asset and configuration, and service level management are now enabled by an understanding of and desire to manage against services as well as technology domains.

Level 3—Business Customer Focus

At this level of the cultural model, the IT organization is organized and managed as an enterprise function. The IT function encompasses both application and infrastructure groups regardless of whether internal or external providers supply them. In essence, the enterprise IT function is managed as a single business unit with a shared governance model and strategy. It is at this level that all aspects of the DPBR value stream are now part of the same organization and can align the priorities of each IT functional group to the end-to-end flow.

At this stage of evolution, all groups function as if they were part of a single IT factory or a single but multifaceted service provider. IT functions and individuals also culturally accept and embrace cross-functional processes such as those described in frameworks like ITIL. Examples at this level include the creation of a single service catalog and a configuration management system that catalogs all IT devices and application details.

Value Stream Orientation

The focus on enterprise IT principles results in a common management system. This system and organization enable and support the cultural acceptance by all groups of the various processes that support the mapping and improvement of the DPBR value stream. For example, application groups no longer claim to be an exception outside the general IT processes.

Customer Orientation

It is interesting to note that while the various IT functions begin to see themselves as a single distributed enterprise organization, the relationship

with the business is still one of separation. The language of customer/supplier is predominate and promotes the perception that the IT function is separate and distinct from the business. Separation can be a challenge to IT as other internal service providers such as facilities, fleet management, human resources, and finance (as described earlier in this chapter) do not operate under this assumption.

Measurement Orientation

Building on the localized metrics listed in Phases 1 and 2, the focus now is on enterprise measures. Measurements emerge in a balanced scorecard format, and concepts of customer, innovation, maturity of operations, and finance become organizational key performance indicators. In essence, there is a move to develop holistic management dashboards based on agreed-upon service levels in the context of being a trusted internal supplier.

IT SERVICE PROVIDER

At this level the organization begins to move toward improving ITIL service strategy and design processes, which enable a customer/supplier relationship such as supplier management, business relationship management, IT service continuity, financial management, demand management, and so forth.

The risk at this level of maturity is that some IT organizations present themselves to the business units as an external managed service provider. I have seen examples where this has been done to the extreme and has damaged the trust relationship with their other business partners. In short, if you put yourself forward as an external provider, you will get treated as one rather than an internal collaborative partner working toward the same business goals.

Level 4—Business Partner-Focused

The cultural division and perception of separation between IT and the business units are not healthy for either party because they require decisions to be made by each group, which is not in the best interest of the overall business goals. Best-practice frameworks such as ITIL that use the term *customer*

in referring to the business unfortunately inadvertently promote this perspective. There is a growing movement among IT professionals focused on cultural transformation that all internal business functions should be referred to as *partners*, believing that the term *customer* should be reserved for the external customer of the organization.

Consider the earlier example in which the transit authority has people who work with technology assets outside of IT and have titles such as engineer and business analyst. Just because they design, develop, manage, and administer information systems does not make them separate from the business they are working within.

Other examples of this collapse of separation based on my experience include the following:

- A major bank, which has moved all data management and transaction-processing functions into the same group that manages the information systems
- A power utility that has combined the traditional functions responsible for power generation and distribution with the IT function responsible for application development and operations tasks of the DPBR value stream

In both of these cases the organization has realized the fallacy of the false separation of business and IT.

Value Stream Orientation

With the cultural acceptance that IT does not function outside the business value stream, management focus is now ensuring that all IT projects, services, and policies are prioritized based on how improvements support business processes and business outcomes. At this maturity level, IT value streams and processes are seen as subsets or enablers to the larger business value stream context.

Customer Orientation

The focus at this cultural level narrows in on business partnership and enablement. IT leadership roles are part of business planning and strategy sessions, and senior IT leaders are included as key stakeholders in the decision-making process for business growth and strategy direction.

Measurement Orientation

IT begins to support its business partners by providing measures that relate to business results. For example, typical IT reports at this level might include the number of checks processed or the number of new users added to an online product line.

IT SUPPORTS THE LINE

At this level, processes such as strategy management and service portfolio management are focused on enabling business partnership and objectives. This laser focus on business objectives is due to the fact that there is a grounded realization that those are the only objectives that matter. IT has gotten out of the business of finding answers for problems that do not exist.

Level 5—Business Value Stream-Focused

The final level of this model describes an organization in which IT is considered to be an integral and critical success factor in achieving business goals such as profitability or expanded market share. There is no more discussion about information technology not being part of the business core competency. It is generally understood that information systems are as much a part of generating business value as are older or non-IT technologies. For example, the business cannot deliver banking, transport, and manufacturing capabilities without the inherent technology and business process automation supported and provided by IT capabilities.

Value Stream Orientation

IT organization and individual participation are now focused on external market goals. The IT function proactively suggests ways to extend market share or revenue through the use of technology, such as smart meters or new online business services.

Customer Orientation

At this level, IT now focuses on the external customer of the business (i.e., the external market and consumer of the overall business services). *Note:* As

organizations mature from level to level in the model, customer perception and focus expands. In other words, there is not a replaced focus but rather an expanded one that takes into account various types of customers and their relative requirements and services.

Measurement Orientation

Building on the capabilities of previous levels, reporting is now focused on business measures and market intelligence through customer and external market data correlation using business intelligence technologies.

IT IS THE LINE

At this level of the model, IT processes begin to meld into business process with an IT focus or specialty. The following processes are consolidated as an example:

- Business risk management and IT risk management
- Business security management and IT security management
- Business continuity planning and IT service continuity management
- Business asset management and service asset and configuration
- Business finance and IT financial management
- Business call center and IT service desk

Where Are We Now?

So where is the IT industry today in the overall cultural model? In my view, most IT organizations are moving from a technology to a systems service mindset. Today's process improvement priorities typically concentrate on support, asset utilization, and processes related to transition to production.

However, one cannot oversimplify or generalize this assessment for any individual organization. Very often you will find various IT groups within an overall organization at very different levels depending on their current relationship with external customers and business units.

For example, in a telecommunications organization one part of the current IT organization may focus on the delivery of telecommunication

services (cellular networks, messaging, data) to an external market such as other telecommunications or direct to the consumer. The primary focus of this group is on revenue and external service agreements. This technology group knows what it is to be either business value stream-focused or part of the line.

Within that same organization, you may find an enterprise resource planning group supporting key systems such as SAP or Oracle Financials. They often will report to or work very closely with the business finance group and are part business and part technology analysts. They have trouble separating in their minds the business process of accounts receivable and the financial system that supports it. This group is solidly in the business partner mindset.

Meanwhile, another application development group works very closely with several business units; they meet regularly and cultivate a close business customer/supplier relationship.

Finally, the IT staff living and working every day in the data center do not think frequently about the relationships between the devices they carefully manage and the business outcomes they support. This group is technology-focused.

The key cultural challenge here is that within the very same organization you may have different IT groups who understand their role in relation to business value in very different ways. Understanding and managing this complexity is one of the critical factors for successfully improving IT value streams and management processes.

Earlier in this chapter we referenced an old saying: “you manage what you measure.” I think a more accurate saying would be “you manage what you *know*.” I recommend that you use this chapter and the corresponding model to raise awareness and open up discussion so that individuals and teams can understand and work with the cultural disconnects that may naturally arise within their organization.

People at lower levels who are firmly entrenched in their attitudes, behavior, and culture often do not realize that there are other goals and a broader way for looking at how the organization works. For example, success for a technology-focused culture may be seen as optimizing each domain by making it faster and cheaper every year. Mission accomplished. IT strategy realized.

This is not to decry technology management. On the contrary—you need good technologists before you can manage service outcomes and participate as a partner with user business units. Try to involve a technology-oriented

group within a business process value stream *kaizen* exercise, and you may struggle to even get them to agree to attend the meeting because they do not see the relevance or connection to their roles. However, if you work with the same group on mapping the value stream of a task within its cultural understanding, such as improving quality and performance of the server provisioning process, they may become willing participants.

So understanding this maturity model and how it applies to the scope of a Lean improvement project will help you to scope activities and deliverables with the best chance for success. For example, each group in the telecommunications organization example above can successfully participate in a Lean improvement initiative provided that the value stream scope being mapped and improved is understood within their individual and collective cultural context. Thus, the model presented in this chapter can be used as a tool for understanding how to successfully work within the cultural mindset of all value stream stakeholders.

In summary, improving value stream and process efficiencies needs to be understood in the context your organizational culture. Evolving a culture up the maturity scale is a long and deliberate journey requiring leadership and vision from senior leadership. A process or value stream project is at its heart a people project; process documentation, maps, role documentation, and so forth only serve as a means for defining and agreeing upon an accepted truth. The true task is changing attitudes, behaviors, and culture.

Note

1. "Planning to Implement Service Management," OGC, 2002, p. 26.

Copyright

Lean IT Service Management: Understanding and Navigating the Cultural Silos of IT Value Streams is an excerpt from the book, *Run Grow Transform: Integrating Business and Lean IT*, published by Productivity Press. This book brings together thought leaders from key IT communities to create a comprehensive view on how the IT organization can align, integrate, and synchronize with business value streams to drive innovation and deliver the greatest value to customers. The book is written by Steven C. Bell, with contributions by Charles Betz (Lean Enterprise Architecture), Troy DuMoulin (Lean IT Service Management), Paul Harmon & Sandra Foster (Lean and Business process Management), Mary Poppendieck (Lean Software Development), and John Schmidt (Lean Data Management).