

October 8, 2004

Enterprise Agility—What Is It?

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In a recent UtiliPoint International benchmark of IT organizations in the North American power marketing industry, an interesting adjective began to emerge. IT Directors and CIOs alike began to use the term “agile” to describe how their staffs were working to solve business issues. Several directors mentioned that their staffs were working “shoulder-to-shoulder” with wholesale traders, power marketing managers and retail organizations in order to satisfy their ever-changing business requirements in a near “real-time” mode.

In the July 2004 issue of *Electric Light and Power*, editor Ted Pollock writes, "It's hard to adjust to change, for we are all the willing victims of inertia. We feel comfortable with the status quo because we're used to it. If something new (technologies, government regulations, reorganizations, etc.) comes along that threatens to rock the boat, we view it with suspicion and, sometimes, hostility. Yet change is a condition of life, the only thing that has brought progress. And, the truth of the matter is, the rate of change itself is accelerating."

Jim Kensok, CIO for Avista Utilities, a provider of electric and natural gas service, speaks of agility: "We continue our steady growth and enjoy the flexibility to use technology that keeps us efficient and agile, and helps us provide the quality service our customers have grown to expect." The 2003 joint press release about an agreement with EDS goes on to say, "The 'On Demand' delivery model, focused on agility, is structured to adapt to the sometimes rapid changes in Avista's business environment. This agreement provides Avista with the ability to quickly deploy resources 'on demand' to emerging projects and to adjust priorities to meet its current and future business needs."

Other Industries Have Adopted Agility

Agility is the mantra in the manufacturing sector today. That industry got the wakeup call in the nineties when Japan's *Lean* manufacturing initiatives raised the bar with higher quality and lower costs simultaneously. While scrambling to follow behind the Japanese, U.S. manufacturers also realized that agility would be the next competitive battleground. To get a jump on understanding how to be more agile, hundreds of organizations and thousands of managers worked in collaborative groups at what was originally called the Agility Forum, creating new knowledge about the impact and sources of change, and eventually, what to do about it. These new understandings created new business strategies and priorities and a demand for new business processes, business practices, and enabling technologies. The result is today's interest in outsourcing, virtual enterprise, web services, service oriented architectures, real-time enterprise, transparent enterprise, on-demand services, commercial off-the-shelf (COTS) applications ... to scratch the surface.

Every organization in every business sector has some areas where it already deals with change somewhat effectively. Examples in the energy and utility sector include: real-time monitoring and control, outsourcing business processes that benefit from economies of scale and/or process improvement, and risk management practices.

Fundamentally, agility is a reality issue. Things have always been changing, and organizations have always had to cope with change, but the pace and breadth of change have exceeded the response methods that once worked. Coping with too much change places organizational viability under threat, and postpones innovation programs.

Reality Hurts Sometimes

Reality is not always a friend to companies, and the Energy and Utility sector is not immune. New regulation and compliance rules impatiently mandate faster response with higher frequency and further reaching implications. The pace of new and useful technology has exceeded effective decision making and implementation resources. Systems that support asset management, engineering, customer care, and service operations have grown in complexity and integration difficulties. Information technology projects regularly overrun costs, exceed deadlines, and fail to meet performance expectations. Security threat and vulnerability are increasing in both frequency and damage potential, exceeding responsible risk limits and effective response capabilities. Merger and acquisition benefit expectations are outpaced by cultural and technological integration complexities. Customer and regulator expectations, molded by experiences with Internet business models, advances in product and service quality, and innovative personalized services in other sectors, are more demanding and more informed.

What is driving agility into the energy and utility sector are the same general issues that faced the manufacturing sector. The details, priorities, and migration strategies are surely different, but the basic needs and values are universal. Maintaining viable business health in the face of increasing unpredictable change is the reactive aspect. Innovative leadership in strategy, business process, product, and service is the proactive aspect.

An illuminating survey taken in 1995 of top executives at 212 manufacturers found and ranked 45 strategic issues associated with agility ([see essay #17](#) on the Library page at www.parshift.com). Most of their issues appear timeless, and many would likely find close resonance in the energy and utility sector if a similar survey were taken today. The energy and utility sector would undoubtedly include additional issues specific to regulatory influences, asset management, enterprise information technology, and the new compliance and security environments.

The energy and utility sector can leverage both the understandings developed by the manufacturing sector and the enabling technologies that have come as a result. But that doesn't mean that everything right for manufactures is right for energy and utility companies, just as everything right for one manufacturer is not right for others. Agility deals with reality, and reality is defined very specifically and individually for each industrial sector and for each organization within those sectors.

Reality establishes limits, both constraining and enabling. Reality issues for the energy and utility sector include the regional business environment, governing regulatory bodies, the organizational culture and behaviors of employees and management, current skill sets and human resources, in-place assets, financial resources, customer base, existing services and products, location-based disaster potential, exposure as a security target, physical asset distribution, supply sources and prices, partners and alliances, risk policies, and in-place legacy information systems. Some of these are, in theory, under internal control, and some are external and beyond control. Being agile doesn't mean being in control. It means having a controlled *response ability* to deal effectively with things that are beyond control—whether internal or external, whether opportunity or necessity.

Response ability is obtained through culture and structure. The structural aspect employs what we call an *RRS* response architecture: Reconfigurable systems of Reusable modules in a Scalable framework. The cultural aspect employs Change Proficiency as an organizational competency: knowing how to manage a response quickly (time), affordably (cost), predictably (quality), and with sufficient range of variability (scope).

Structure and Response Ability Examples:

- "An outsourcing partner can take control of aligning technology, operating costs and business strategies by deploying professional management techniques. Leveraging an outsource vendor's economies of scale can spread risk more equitably across the enterprise." [Jamie Biddle, *Utility Automation and Engineering*.] A well-run outsource service center, of any kind, that handles multiple utilities has (potential) economies of scale, enabling better training standards, higher management standards, and best practice standards (scalable framework). A larger pool of total human and system resources (reusable modules) is less vulnerable to staff fluctuation and system problems, and more responsive to peak and growth needs. Their plant is composed of human and system resources focused on a common service, which develops and relies upon management skills for effective resource utilization (reconfigurable systems). Not all outsource service centers are well-run—but ones that are have a business model that enables agile benefits to be passed on to their clients.
- An electric utility that sets up mutual aid agreements with neighboring utilities could cover peaks in outage response requirements that exceed local capabilities. The mutual aid agreements would set standards for cooperative interaction (scalable frameworks), practice drills would engage in useful work while cross-training work teams for productive interaction (reusable modules), and management responsibilities would be designated for maintaining and deploying cross-trained teams (reconfigurable system). This can be seen today as utilities come to the aid of power companies in Florida restoring electricity in the wake of multiple hurricanes.
- Simon Went, systems development manager at London's Calor Gas: "In today's increasingly competitive market, customers are demanding better service, speed and agility at reduced costs. It is essential that we move toward a real-time framework so that elapsed times for responding to and fulfilling our customer needs are collapsed to the absolute minimum." [2003 TIBCO press release.] Though he wasn't referring to an *RRS* framework specifically, he clearly understands that the nature of the framework determines *response ability*.

Culture and Response Ability Examples:

- Harvard's David Upton wanted to understand why it was so difficult for companies to become more flexible, even when they saw it as a competitive advantage. To accomplish this he studied 61 factories that make fine papers in North America, and compared the ways in which each employed automation and computers in the factory. His answers showed little correlation between flexibility and the employment of technologies intended to make factories more flexible. Indeed, many common assumptions were proven incorrect, including no relationship found between size of plant and flexibility, and no relationship found between work-force experience and flexibility. Instead, the flexibility of these plants was primarily determined by the people, and their personal interests and concerns for flexible operation. "Plants whose managers had not made flexibility a clearly understood goal were much less flexible than those whose managers had." [David Upton, "*What Really Makes Factories Flexible*," *Harvard Business Review*, July/August 1995.]
- Culture is determined by language, for it is language that molds and expresses the things we value, whether thought or spoken. The language of response ability includes specific types of proactive and reactive change, and performance metrics for expressing acts of change. These will be explored in detail in future discussions. What Harvard's Upton discovered was that people who had a vocabulary for expressing, debating, and comparing proficiency at change were focused on the values and processes involved.
- UtiliPoint research has reported that a balanced score card approach to performance metrics is already employed by many in the energy and utility sector. When strategy maps are overlaid on these scorecards, development of change proficiency is linked to RRS-structured business processes, which in turn are linked to the latest customer/stake-holder values, in turn linked to top level performance criteria. These linkages make the need for change proficiency explicit, and drive this awareness into the organizational culture.
- "Those who fail, or refuse to adjust to it [change], are condemning themselves to professional obsolescence. How can you adapt to change? First, try to understand it...With understanding comes confidence. That's why the first step toward coping with change is understanding it, the whys, hows and whats of it... And, face the change with confidence. "Knowledge is power" is true so far as it goes. But knowledge is a lot more—it's also ability, confidence, and promotability." [*Electric Light and Power* editor Ted Pollock, July 2004.]

Response ability alone does not make an organization agile. It is necessary, but it is only a capability. In order for that capability to be employed effectively there are two more necessary elements: timely knowledge management and decisive value propositioning. These, too, will be explored in subsequent discussions.

For example, agility is a word we often associate with cats. When we say a cat is agile we observe that it is both physically adept at movement and also mentally adept at choosing useful movement appropriate for the situation. Agile carries with it the elements of timeliness and grace and purpose and benefit as well as nimbleness. A cat that simply has the ability to move quickly, but moves inappropriately and to no gain might be called reactionary, spastic, or confused, but never agile. Picture a cat on a hot tin roof. Conversely, a cat that knows what should be done but finds itself unable to move might be called afraid, catatonic, or paralyzed, but never agile. Like the cat that's got itself up a tree.

Agility fundamentally means confronting reality, in the business environment, in human behavior, and in technological infrastructure. This new fundamental view was not factored into earlier techno-centric understandings of agility. As the energy and utility sector migrates to agile business processes and practices, this perspective, building on the knowledge developed by the manufacturing sector, can avoid false starts and short-cut the process.

----- Sources for more information include -----

- www.parshift.com on organizational aspects
- The August 2004 issue of *CIO Magazine*
- UtiliPoint International's [IssueAlert](#)[®] archives

Rick Dove is a recognized thought leader and change agent for agile enterprise and agile systems of all kinds. He co- led the seminal effort that defined agility in the early nineties as the survival need of the new millennium. He subsequently organized and led the Agility Forum's industry-collaborative work that identified and defined concepts and principles for achieving agility in all aspects of enterprise. He's architected and managed deployment of agile enterprise IT infrastructure and business processes. He is a prolific writer and frequent speaker on the subject, and the author of Response Ability: The Language, Structure, and Culture of The Agile Enterprise (Wiley 2001) and Value Propositioning - Perception and Misperception in Decision Making (Iceni Books, 2005).