

Enterprise Agility—What Is It and What Fuels It?

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"The current economic and competitive climate has focused organizations' minds on the need to become more agile, with 84% of UK organizations regarding business agility as vital to their future success." So says *The Age of Agility*, a Gartner UK cross-industry 2002 study commissioned by BT Group, nee British Telecommunications. In the utility sector: "The industry estimates that becoming more agile could contribute up to 9% of revenues by 2005...80% of respondents regarded agility as an important priority for their customer service and support functions [80% for IT as well], whilst 70% see agility as important for sales and marketing." Sixty percent responded that agility in operations was a priority. "90% regard the benefits of becoming more agile as primarily creating more valuable customer interactions. 70% see the benefits in terms of more effective internal and external processes." As to where agility would provide substantial contributions, 80% said Customer Service, and 50% said Security, Knowledge Management, Asset Management, and Cost Efficiency.

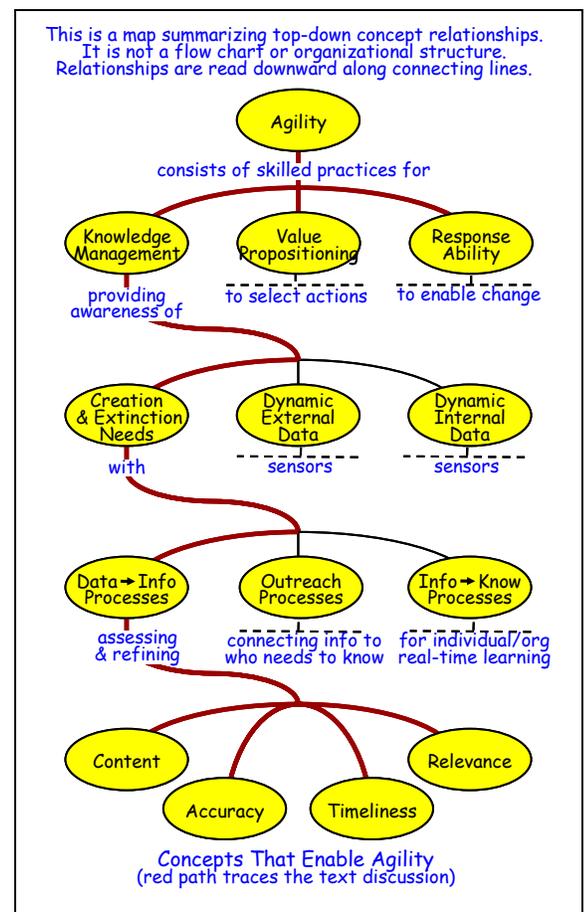
Welcome to the 21st century. This new environment of surprise and change is not going to blow over and settle down. The accelerating pace of new technology is a prime driver on the surface, but behind that are the accelerating paces of new knowledge development and new stake-holder expectations, and the tighter coupling and complexity of an interconnected economic community.

Agility, like any business priority that gains strategic importance, creates demand for enabling products and services. The information technology sector is usually the first to respond, for it is the core of both enterprise infrastructure and business process implementation and management. This vendor-rush to establish proprietary beachheads typically results in a variety of disparate interpretations and a techno-centric solution focus. These are valuable and natural developments, but they are not sufficient. Solutions do not deliver real value if they are not fit to the true nature of the need—and the need for agility is highly organization and situation specific.

A previous [discussion](#) looking at Enterprise Agility skimmed some agility-enabling requirements. Here, we overview the total set of requirements, and explore one of them in more depth: knowledge management for visibility and awareness. Being agile enough to respond is of little value if events that require response are sensed and understood too late. The other requirements will be explored in subsequent discussions.

To put things in context, enterprise agility has three core enabling elements: 1) accurate timely awareness that a change should be made, enabled by focused *knowledge management* processes, 2) effective *value-propositioning skills* to prioritize among competing changes and competing response-alternatives to those changes, and 3) a facilitated ability to change business processes and to customize operational responses in real time, which we call *response ability*.

Response Ability—The ability to change effectively, or rather its lack, tends to be the pain felt initially that creates a call for more agility. Maybe it's a project that overruns cost, takes much too long, fails to meet performance expectations, or simply wasn't approved because it can't be integrated into the current legacy environment. Perhaps it's an unexpected operational situation that overwhelms resources and capabilities. Possibly it's regulatory or compliance requirements that can't be accommodated quick enough or affordably. Maybe it's rising risk or vulnerability that can't be mitigated responsibly, or an ugly merger/acquisition integration. Generally it is the inability to develop, support or change a business process effectively. Whatever, it is usually the sense of failure in the face of a needed or desired change that illuminates the need. This realization generally focuses an organization on the factors that inhibit change—the lack of *response ability*. The enabling requirements for response ability have been shown to be rooted in both culture, and in the underlying structure of processes and procedures—subjects for subsequent exploration.



Value Propositioning Skills—Timely corporate response, when a change is indicated, doesn't happen without a timely decision. But a fast decision is not necessarily a good decision—a crucial area overlooked in earlier agility research. A company that has developed good *response ability* has alternatives, which require intelligent choice-making based on insightful problem definitions and sound value propositioning skills—both on the part of decision makers and on the part of decision champions. Maybe it's a choice among new software solutions that have conflicting champions. Maybe it's a choice among alternate responses to new risks or security threats. Perhaps it's a choice between what to outsource and with whom, between different pricing initiatives, between different new services to offer, or between real-time operational response priorities. Decisions are much easier when there are few or no choices. Herbert Simon's Nobel Prize winning work identified *satisficing* as a pervasive human psychological force which accepts the first alternative that satisfies stated requirements—explaining, but not excusing, why the best solutions are often not considered. Recent work on the human behavioral nature of decision making points the way to better problem understandings, better value assessment, and better decisions. We'll look in depth at the skills of value propositioning at a later time.

Knowledge Management—an overused term with broad interpretation, but with real meaning for the agile enterprise. Knowledge about external and internal events and status that call for attentive response is the fuel of agility. Its lack is an ever present observation of hindsight; but if the ability to respond exists, it becomes a glaring pain. Maybe it's inaccurate network-asset knowledge that inhibits timely service restoration. Perhaps it's mismatched supply-demand realities that impact service quality. Possibly it's lack of operational or corporate transparency that runs afoul of Sarbanes-Oxley. Maybe it's lack of knowledge about new security threats and vulnerabilities, or a lack of knowledge about who needs newly available information or who needs obsolete knowledge corrected. In all cases, not knowing things that should be known is frustrating to managers, and met with decreasing tolerance by both stakeholders and law.

Where Should an Organization Start?

The progression of operational response activity is generally from: (1) awareness that response is indicated, to (2) evaluating and deciding upon the best action to take, to (3) implementing the response. Yet the progression of competency development is generally the reverse. Though this may seem backward, it is a natural course in typical reactively driven business environments. An inability to affect a management-demanded change first stubs its toe on intractable processes and infrastructure. Once these are made *response able*, it becomes evident that successful responses were not-often-enough the best responses to make—then the processes of decision making and value assessment come under scrutiny. When these are honed, it then becomes evident that the awareness of decision-triggering events is inadequate.

Working backwards through these three steps removes roadblocks that provide immediate, though attenuated, value at each step. Whereas working forward cannot provide value until all three are in balance. However, these statements are only true when looking at total-enterprise agility. When a specific department or process is the focus, it may well be that the lack of timely information is the roadblock, rather than effective decisiveness or response implementation. There is ample evidence that incremental successes in process reengineering, working one area at a time, is a much surer way to corporate-wide success. For one, the incremental process provides proof of values and methods to other areas with high resistance and inertia. For another, it can attack high-payoff, fast result, low cost areas to build momentum and convert skeptics. Importantly, it narrows the focus to a few variables rather than the complexity and variability of corporate-wide infrastructures and processes.

Content, Accuracy, Timeliness and Relevance

When knowledge management focuses on awareness it deals with distinctions between data, information and knowledge. Monitoring external and internal events and status produces data, and lots of it. That data becomes information when it is filtered for relevancy, timeliness, accuracy and content. But no action takes place on that information until it becomes meaningful knowledge, a very personal thing that resides in heads, not in data bases. Good awareness demands good sensors in both external and internal environments. With all this sensor data, effective awareness must have processes for selecting and transforming data into information, providing that information to the right people, and helping them turn it into actionable knowledge.

Data has four distinct qualities. *Accuracy* and *Timeliness* can be facilitated, or even accomplished, with technologies and outside services. *Relevancy* requires thoughtful human intervention—for it needs an assessment that action is required. *Content* is a blend—for only a human can determine if everything needed for intelligent action is present, and what is needed to augment sensor data to complete the data-to-information process. These four qualities, by the way, are core concepts embedded in current U.S. Defense Department modernization strategies for warfighting—where real-time information superiority is the new focus (reference at the end).

Content—Data has to be complete before it can be turned into useful information. Data coming in from a live feed of external events can indicate that a response is probably necessary, but these events may need correlation with other events, as well as with internal status, before proper action can be determined. Complete internal data can also be a problem: Gail and Henry Kucera write in *GeoWorld* of a new technology initiative to plug a hole in an organization's

geospacial information: "Imagine ... a spatial dataset that describes something of great importance to your business. When you .. demonstrate how nicely you can scroll, zoom and query the displayed data, your boss tells you that part of the area has changed, and your dataset already is out of date. Then he asks if you can show him how it looked back when a certain event took place or predict how it might look next year, which you can't do... To ignore spatial change is to leave an entire dimension of information and its effects unrevealed and unconsidered." They go on to say that the National Technology Alliance (NTA) is starting a project to develop commercial technology with this time-travel-through-data capability (reference at end).

Accuracy—Technology can provide accurate data for decision support, but only if accuracy is made a project requirement. Tom Petrik writes about an Outage Management project at a mid-sized utility in *Electric Light and Power* (April 2001): "Only one problem: the system wasn't performing ... during the deployment process, everyone was so intent on getting the new system on line that they failed to give full consideration to data-quality requirements ... Now bad data is being pumped to the outage system like bad gasoline ... I estimate that 85 percent of system deployment failures are caused not by technical problems but by bad data."

Timeliness—Technology offers good solutions for timely internal data visibility in many varieties and buzz words: Enterprise Performance Management (IBM), Corporate Performance Management (Gartner), Dashboards (data display technology), Real-Time Enterprise (sense-and-respond architecture), and so forth. The focus is on visibility of real-time operational-status—with general technologies for cross-industry application. One company with a unique approach has a very utility-specific and interesting twist on timeliness: 4DataLink's technology "enables (1) real-time visibility of all asset relationships and their status, (2) enterprise-wide views emphasizing different user needs like geographic, demographic, logical or evolutionary information; and (3) *perfect recall of all past history and evolution* (reference at the end)." The NTA project mentioned above seems to be reinventing something that already exists—indicating their own need for better knowledge management.

Relevance—This is the crucial issue in the end. Technology has given us all a bad case of information overload. C.D. Hobbs observes in *Utility Automation & Engineering T&D* (March, 1999): "The technologist plays a critical role in ... designing the applications and technical architecture that forms the IT foundation for doing business. Adaptability and agility in reconfiguring these architectures is crucial to rapid anything—but particularly rapid response to new information requirements ... But let's not forget that this begins by a clear request for information required to execute business strategy, and this request will never come from the technologist. Specifying the information requirements to execute strategy lies solely in the province of the business leaders. Developing, or acquiring, this talent among the leaders of the emerging energy business segments will be a critical differentiator of successful CEOs and their energy businesses...."

In The End...

Agility is a strategic objective that must co-exist in harmony and synergy with an organization's other strategic objectives, priorities, and capabilities, whether at the enterprise level or the departmental level. It is enabled by infrastructure, business processes, and strategic policy; but in the end, it is limited by the visceral knowledge and values of change proficiency held by all involved. Agility can't be bought in a box—it must be actively practiced as a mind set. And to be effective, it must be fit to the specifics of the organizational needs and realities.

According to Gartner's *The Age of Agility*: "80% of executives in the Utilities industry believe that becoming agile will require whole-hearted organizational transformation." Whole-minded at least, but not as hard as it sounds. Proven methods supporting an organization's current priorities and resource commitments, while simultaneously advancing the transformation to agility, will be explored subsequently.

----- Your comments, issues and concerns are solicited at dove@parshift.com. They will influence this continuing exploration of Agility. References and sources for more information include:

- Gartner's *The Age of Agility* [an overview only, contact BT or Gartner for full report access] www.btplc.com/News/Articles/Showarticle.cfm?ArticleID=74731ace-181b-4d32-8396-ec5684ec31ee
- The U.S. Dept of Defense information focus, www.mors.org/publications/phalanx/dec00/feature.htm
- The NTA initiative, www.geoplace.com/uploads/FeatureArticle/0409psc.asp
- 4DataLink's cross-time visibility www.4datalink.com/product_and_services/business_case_real-time_visibility_v3.1.pdf
- www.parshift.com on organizational aspects
- UtiliPoint International's IssueAlert® archives at www.UtiliPoint.com

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 developed and managed deployment of agile enterprise business processes and IT infrastructure. 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).