The Elements of Change Part 3 – Technical Work

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TECHNICAL WORK DEFINED

I am often asked, "What are the easiest attributes to instill into a world class organization? What are the most difficult?" After conferring with many colleagues on this perplexing question, my stock answer is simply, "The easiest part is the technical work. The most difficult is changing leadership behavior and culture." The most understated or executed part is clearly the organizational effort necessary to deploy new practices and leadership behavior.   Additionally, the question, "What does one mean by 'technical work'?" has a bit of a more lengthy answer, as one's view of technical work tends to be very narrow.

So what is "technical work?" In the simplest of definitions in the context of lean, TQM, kaizen, or whatever-you-want-to-call-it paradigms, the technical work defined is "the deployment of those methods, tools, and approaches that deliver better quality, improved product reliability, improved process speed and flexibility, improved process and resource reliability and greater operational alignment." In other words, the deployment of Total Quality Management/6 Sigma/Just in Time/Total Productive Maintenance methods across an entire value stream. I find it ironic that this type of improvement is what many companies say they want, forgetting to ask how to make it happen and how it is to be sustained. My experience tells me that most often the "technical" elements described above tend to be the only elements that exist in one's mind excluding a wide range of methods that affect more than just the tactical level processes.

TECHNICAL BASED STRATEGIES

Other "technically" related methods that help in the deployment of the three change elements are worthy of mention. Policy Deployment and Quality Function Deployment methods focus on aligning the deployment of improvement as much as they help to establish sound customer based data. Strategic methods that help establish a company's business direction fall within the scope of this "technical" umbrella. My 20 years of consulting experience have led me to believe that few companies actually do decent strategic planning. Many companies which supply parts and equipment implement strategies driven by their customers, so in effect their strategy is to "shut up and do what they are told." The tiered suppliers to automotive and aerospace fall within this category. The work of defining and exploiting alternative markets while taking into account a company's technical competency is seldom done because business leaders are oftentimes too bogged down with supplying orders to customers and firefighting the problems that prevail.

The purpose of this publication is not to explain the methods of resource, process and product reliability, speed and predictability. Those are well known. This publication will focus on purpose and the necessity of alignment and coherency. Tichy believes technical based strategies "alter the information-processing capacity of the organization." This aspect addresses the need to possess data to improve an

TECHNICAL BASED STRATEGIES, continued

organization's capacity "to deal with uncertainty brought on by changing environmental conditions, new technologies, or complexities in the (technical) tasks."

Possessing technology that provides strategic information is critical to the deployment of those "strategic planning" methods that will help a corporation align goals, resources, methods, people, and products, thereby, delivering value for their customers. From a consulting perspective our job is to entice companies to regard the strategic planning process more seriously and use the methods necessary to make it effective. This too is "technical" in nature. The on-time delivery of internal information necessary to make appropriate decisions is essential to an organization's function. I have seen too many companies with poorly aligned information processes actually slow production work down. This is notoriously true in upstream engineering design organizations for 'make to order' equipment manufacturers.

Technical alignment is about…

- Getting the improvement work at the core process to address and create results which meet strategic goals.
- Ensuring that all information systems provide correct and necessary information at the right time the data is needed.
- Using group methods to force a dialogue which create technical alignment to ensure speed and reliability of systems design.
- Aligning a customer's product specification with the build specification and quality parameters using Quality Function Deployment, (a "technical" method).
- Strategic planning process with its many analytical and evaluation tools. Again this is "technical work" and not often included in a journey leading to change.
- Facilitating agreement with the strategic direction and the operational execution of the business. This may seem redundant, but it works both ways: up and down, strategic to and from operational or tactical. The communication, the adherence to metrics reporting, and reviewing performance information.

In his outstanding book, *Time Based Competition*, Joseph Blackburn begins with the analysis of a business from its competitive position. He cites how several companies focus on reducing lead time, using speed to market, compressing time as a factor in design, engineering and production, all with the goal of gaining competitive advantage. You might say this is what "lean" is about , but the reality is we often do "lean" work for its own sake, forgetting about or not even understanding its strategic implications.

A DEEPER LOOK

Information systems' alignment and the speed with which information enables or prohibits production decisions to be made deserve deeper examination. This investigation is often ignored because we assume that ERP systems cannot be penetrated and are impregnable, so we ignore the lack of alignment to the core process within the ERP system, to our detriment. This is difficult work, because IT systems are the most difficult to change, but they cause huge cost if not aligned with the core process of a business.

Another area of a core business process receiving little attention is the engineering development process typically found in equipment manufacturing companies with long lead times. Methods exist which effectively reduce data errors and shorten lead time. These methods can be included within the "technical" domain.

We need to learn to expand our view of the technical methods used in the entire value stream of a company. To learn more, contact us at 865-323-3491.