What Do You See in a Process?

The lead article on lean in process industries suggests how tough it is to define and classify different processes. Indeed, business processes have more business-to-business similarity than manufacturing processes. Everybody has an order entry process, for example. Defining a process is necessary to improve it no matter what improvement means to you. Whether large or small, improvements change processes.

When comparing similarities and differences between "lean" and "green," a similarity becomes obvious. Becoming environmentally sustainable by a strict definition is a journey much like the lean journey; zero environmental waste may never be possible, but one can always come closer to it. But a big difference is in how people see processes.

For example, from a lean perspective, the scope of the processes we see is represented by value stream maps. In manufacturing they can span part of a plant, door-to-door in a plant, or all or part of a supply chain, from ore in the ground to end user. In service areas, the value stream map can track the flow of customers, the flow of information or money (as with an order entry process), or the flow of something integral to the service (like food in a restaurant). The primary objective is to eliminate non-value added activity — waste that customers would not pay for if only they could see it.

Engineers and the environmentally-oriented are unlikely to describe processes the same way. Both call them "systems." They define boundaries around systems as small as nano-processes and as big as ecosystems in order to measure the materials or energy crossing these boundaries. The environmental objective is to eliminate waste using all resources and eliminate abuse of all natural processes. When viewing manufacturing, environmental engineers may define systems ranging in scope from nano-sized to the ecosystem level, examining every system that a company’s operations may affect.

Accountants measure dollars crossing transactional boundaries of processes as they see them. Those boundaries may differ from those that others see. In part, that causes the cost distortions that lean accounting tries to remediate. But from an environmental perspective, much worse is that accounting measures only things that can be assigned a dollar value. Thus it was born blind to a great deal that is important.

In viewing a process, the time horizon is important. Seldom do we view a process as having a nearly infinite time horizon. However, that’s the perspective from which an environmentalist projects its effect on nature. That projection is also an inside-out performance measurement. We usually think outside-in; how everything outside our system affects it instead of how it affects everything else. However, a bigger, longer-term perspective is needed for process changes such as shifting a product’s life cycle from birth to death in a landfill, to perpetual recycling or remanufacturing cycles.

“What do you see” in a process is a good question to ask. The actions we take relate to what we do or don’t see, and the question helps reconcile our differences.

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