EFFECTIVENESS AND EFFICIENCY OF DAIRY INDUSTRY ENTERPRISES

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Efficiency and effectiveness were originally industrial engineering concepts that came of age in the early twentieth century. Management theorists like Frederick Taylor and Frank and Lillian Gilbreth designed time and motion studies primarily to improve efficiency. Work simplification efforts again focused primarily on questions like "How fast can we do this task?" Work simplification also led to terminology like streamlined processes and efficiency experts, but the emphasis was still on time and motion. The concept of effectiveness, which takes into consideration creating value and pleasing the customer, became popular in the United States in the early 1980s when Americans perceived Japanese products such as cars and electronics to offer greater value and quality.

The words *efficiency* and *effectiveness* are often considered synonyms, along with terms like competency, productivity, and proficiency. However, in more formal management discussions, the words *efficiency* and *effectiveness* take on very different meanings. In the context of process reengineering, Lon Roberts defines efficiency as "to the degree of economy with which the process consumes resources-especially time and money," while he distinguishes effectiveness as "how well the process actually accomplishes its intended purpose, here again from the customer's point of view."

Another way to look at it is this: efficiency is doing things right, and effectiveness is doing the right things. For example, think of a company that was successfully making buggy whips as automobiles became the mode of transportation. Assume that the processes used to make buggy whips were perfect.

The relationships of internal and external suppliers and customers were perfect. The suppliers and customers teamed together to make perfect buggy whips. The buggy whips were delivered on or ahead of schedule at the lowest possible cost. This company was very efficient. However, the company and its strategists were not very effective.

The company was doing the wrong things efficiently. If they had been effective, they would have anticipated the impending changes and gotten into a different market.

Efficiency and effectiveness are often considered synonyms, but they mean different things when applied to process management. Efficiency is doing things right, while effectiveness is doing the right things. A third related concept is adaptability, which is flexibility or the capability to respond fast. In some respects, it is this capability for an organization to reinvent itself that ensures its long-term survival and success.

Organizational leaders can't comprehend the extent to which their organizations and processes are efficient, effective, and flexible unless they choose and use the right metrics. Of course, the results of those measurements should be fed back to the process owners so that they can improve the organization and the processes. This includes management processes as well as lower-level work processes. By their very nature, management processes can positively or negatively impact other work processes because they quite often deal with approvals (signature cycles) including requisitions for the purchase of essential equipment.

Answers to who, what, where, when, and how questions can be used to determine if the work should be done at all, who should do it, where and when it should be done, and how the work should be done. If these questions are answered truthfully, many activities in a process will be eliminated because they do not add value. Sometimes, entire processes will be eliminated.

Employees need to learn about and use various concepts and tools which will help them and their processes to be more efficient, effective, and flexible. For example, flow-charting the curriculum process mentioned above would have

highlighted the need to replace serial sub-processes with sub-processes that were simultaneous and the need to eliminate duplications of effort and long waiting times.