

## To Sharpen the Improvement Focus, First Understand the Big Picture

By Richard Rachner, Principal, Fulcrum Edge, Inc.

In the auto industry and in every industry with which I'm familiar, people in each part of the organization tend to view themselves and their own departments as where the action is. Most people want to do the very best job possible and see their contribution as critical to success. They're quick to identify opportunities for improvement, and confident that their requests for a bigger budget, more people and the latest tools will pay off handsomely. Sometimes these local improvement ideas have a real impact on the success of the organization. Often, they don't. Why?

The reason may be that the big picture perspective is missing, resulting in a lack of understanding of the organization as a system in which the parts are interdependent, and in which individual contributions impact the whole – for better or for worse, and sometimes not at all. The reality is that it can be difficult to see the big picture when you're part of that picture. Without this perspective, it is almost impossible for an organization to focus actions on those areas that will make the biggest difference – the bottlenecks, or what I usually call *sweet spots*. Unless we are looking at the big picture and can identify the system's bottlenecks, everything may appear to be an opportunity for improvement.

These concepts are easy to grasp intellectually, and most of us learned about them in the classroom; however, they run counter to the way most of us learned to behave in the reality of our organizational roles. As individuals, it is quite natural to look at everything from our own sphere of influence. As members of distinctive functions we learned to put our efforts into optimizing our piece of the pie. And as leaders we were taught that keeping everybody busy, making improvements on every front and measuring everything, everywhere would add up to the best bottom line results.

If we could step back we'd realize that not all improvements have equal impact and that we can't afford a broad brush approach. As an example, if we have money to invest in 50 new computers, spreading them evenly like peanut butter over the entire company will probably not achieve the systemic improvements we desire. Maybe one or two departments should get all 50 computers. As another example, if we have to cut 10% of the operating budget, an across-the-board "lawnmower" approach will probably result in eliminating some critical capability. Instead, maybe we should be adding resources in some areas and reducing them in others. A big picture view and an understanding of the inter-relationships within the total organization will lead us to concentrate on those improvements that have the greatest impact, for example, on bringing products to market with the speed, quality and cost-effectiveness needed to satisfy customers and beat the competition.

In each business system – whether that system is a plant, a capital appropriations request process, or the entire supply chain – there is usually just one or at most just a few things that are limiting throughput. And that's where spending money, adding resources and improving processes make sense. Surprisingly, many managers and executives don't know where their

bottlenecks exist. If they aren't putting effort into getting more through a bottleneck improvements in other areas may be ineffectual and a waste of money.

If we want to know where the bottleneck is we first need to define the system in terms of resource capacity, whether the resources are people or machines. It's safe to say that most organizations do not have a good handle on their actual capacity, particularly in areas where knowledge-workers are the key resources. Determining what each resource group can do and comparing it to the demand for that resource is a key step in understanding the system and finding the *sweet spots*. In a manufacturing process this can be done somewhat quickly because the output is visible, e.g., parts moving through the process. In the case of product development it is much more difficult because the deliverables are harder to see, have much greater variability, and significantly longer lead times than in manufacturing. However, the good news is that modern software tools have made this process much easier and far more accurate than it used to be and make it much easier to institutionalize a process of ongoing improvement in complex multifunctional environments.

Once the bottlenecks of the system have been identified, it is the role of leadership to make the interdependency of the functions in the system clear and to measure performance accordingly; otherwise, people will revert to the silo mentality and the well-intentioned sub-optimization that results from territorial thinking and behavior. Unless people are constantly aware of how their work affects the bottleneck in the process or project, they'll continue to focus on optimizing their own piece of the pie. Leaders will almost always have to institute new performance measurements to drive systemic behavior because conventional efficiency measures tend to reinforce turf behavior.

The challenge of managing any business system, whether it is a product development organization or a supply chain is to get more through the pipeline faster and at higher quality and lower cost. Knowing where the bottlenecks are is the beginning of the end of fixing things that don't need fixing and wasting time and money. Rewarding people for moving more work through the bottleneck is the necessary first step to focusing on those improvements that will yield the most benefit to the bottom line. And this sharp focus on profitability can only be achieved by first understanding the big picture.

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Richard J. Rachner retired from General Motors Corporation in 1999 after 37 years with the company. Beginning as a cooperative Engineering student at General Motors Institute, Rich has work experience in Manufacturing, Engineering, Human Resources, International Personnel, Worldwide Purchasing, Supplier Development, and Competitive Operations at Cadillac, Corporate, Adam Opel, GM Europe, and North American Operations. During his most recent assignment as Executive Director of Constraints Management at GM, he was instrumental in applying Theory of Constraints (TOC) principles to improve the performance of manufacturing, vehicle distribution, and product development operations. He is now President of his own consulting firm specializing in the utilization of TOC and other tools to help customers generate bottom-line results. In addition, he is a Principal in Fulcrum Edge, Inc. which specializes in providing consulting services to business leaders.