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What is the Expected Bottom Line Impact Of Productivity Improvement?

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No simple and true answer to this question can be found. Productivity improvements impact capacity rather than directly impacting costs or revenue. Consequently, other more strategic factors will determine whether and how much of an impact the productivity improvement will have on the bottom line. The impact on the costs and/or revenue depends on which operations senior management targets, the productivity improvement efforts and how well management plans for and utilizes the extra capacity generated.

To illustrate this, let's look at five different scenarios:

Each organization has 30 people at an average cost per person per year of \$50k. Each organization is able to achieve a 50% reduction in the amount of time required to handle the current workload.

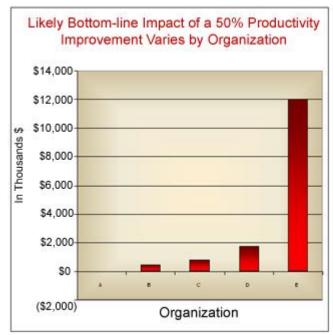
In a simple (imaginary) world, the impact of productivity improvement would be the same – 30 people, 50% productivity improvement, \$50k/year – should be simple math, right? In the real world, the impact could vary dramatically. Other factors, such as potential for sales growth, transferability and scarcity of skills, attrition, etc. have a very significant impact on the value of any productivity improvements the organization may achieve.

The graph to your right illustrates how the bottom line impact varies for different organizations, even when the magnitude of the productivity improvements and the size and cost of the organizations are identical.

Organization A reduces the amount of time required to do the work by 50%. Demand for the work is stable, neither increasing nor decreasing. No new value-adding work is brought into the organization and there is neither attrition nor layoffs. People quickly add non-value-adding activity to fill the gap and make themselves look and feel busy.

The productivity improvements produced neither revenue growth nor cost reductions. The impact of the improvement in Organization A is slightly negative – equivalent to the value of any time and investment expended to achieve the productivity improvement.

Organization B's corporation also has no use for the excess capacity created by the productivity improvements. Business is flat and the skills are not transferable to other parts of the organization where they need people.



Organization B takes advantage of the productivity improvements to lay off 15 people. That amounts to \$50k x 15 people laid off, or \$750k. But transition costs associated with the layoff amount to \$20k each, bringing the savings down to \$450k in the first year. Excess office equipment sold on the secondary market yields a small pittance, bringing the bottom line results up to \$452k. The freed-up space has no monetary value.

The other parts of the corporation take note of the layoff and stonewall any future efforts to study and improve their work.

Organization C has 50% attrition. They stop hiring and use continuous improvement and process redesign to shrink the time required to do the job by 50%.



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Because they do not have layoffs, their return on the study and improvement of work is: 15 people they don't have to hire x \$50k/year, or \$750k, plus the costs of hiring and training the additional staff (\$50k) to total \$800k the first year.

Organization D expects to double sales over the next year. Improving the work so as to cut the required time in half enables them to forgo hiring an additional thirty people at an annual cost of \$1.5 million and arranging training, space and equipment for the new employees (\$250k) – totaling \$1,750k the first year. Alternatively, if they could handle twice as many customers at almost no additional cost, they may be able to find a new price point that would very profitably take away business from all their competitors.

Organization E is a bottleneck organization – that is, the skills required to do this work are in scarce supply and they cannot hire the additional people to accommodate their unmet demand.

In this case, the true value of improving the productivity is not tied to the salaries of the people or cost of hiring but rather to the profit of the potential sales that are being lost. In this example, the special-skilled workers now complete 1,000 units of work each year. Each unit of work yields a gross margin of \$400. If one could double this organization's through-put, selling the additional output at a gross margin of \$400 each, the bottom line impact of the improvement would be the value of the additional sales: 30 current workers x 1,000 additional units x \$400 margin each, or \$12 Million.

Deciding where to seek productivity improvements:

- 1. When you want to gain productivity improvements, you want to first look toward organizations that are growing and profitable rather than those whose workload is shrinking and/or unprofitable. This may seem counter-intuitive for companies that think of productivity improvements as a means of cost cutting and focus most of their attention on the lagging areas but growth areas are clearly where the most lucrative returns from productivity improvement will be found.
- 2. If no parts of the business are currently growing, look to where they might leverage excess capacity to help gain business. The additional capacity gained from studying and improving the work enables an organization to bring in considerably more revenue at the same cost structure, providing a pricing advantage. Or explore whether the capacity can be used to add services which drive up business volume.
- 3. If there are no growth opportunities, look to areas with high attrition.
- 4. If there are no opportunities for growth and no areas with especially high attrition, develop a resource plan that identifies how many people you will need to have per department and improve the work to meet that number. You will want to try to retain the people most effective at studying and improving their own work and that of the organizations they manage, releasing those who are least effective at studying and improving their work. The contrary more often happens, with downsizing organizations disproportionately retaining people who are least likely to recognize and capitalize on the opportunities for eliminating waste in their work.

So the real answer to the question, "What is the expected bottom line impact of a productivity improvement?" is ... it depends. It all depends on the value to you of the extra capacity that the productivity improvement will produce. People who are skilled at studying and improving work can find ways to improve virtually any process. The question management must answer is where would the productivity improvements create the most value and focus the efforts there.