

Leveraging Assets to Drive Earnings and Shareholder Value Growth

When evaluating strategies to drive earnings growth, manufacturers often focus on reducing costs of raw material inputs, reducing headcount and other manufacturing expenses, and growing revenues through new products or customers. Combined, the first two are important, as Cost of Good Sold (COGS) can add up to 60-90% of revenues for most manufacturers. The third area, organic or acquisition-driven top-line growth, is equally important since “cost cutting” alone does not achieve sustainable profitability. Another and often overlooked strategy to grow earnings is leveraging fixed and operating assets. The degree to which fixed and operating assets are leveraged can be measured financially, by looking at asset productivity, and operationally, by looking at asset effectiveness.

Asset productivity measures the amount of revenue generated for every dollar of total assets. Strategies for improving asset productivity include:

- Having an optimal number of manufacturing and distribution facilities in the right locations (i.e., close to major customers and/or raw material suppliers).
- Developing accurate visibility into demand forecasts such that service levels, inventory, equipment, and labor can be managed in the most efficient way possible.
- Managing working capital (inventory, receivables, and payables) efficiently in order to maximize cash conversion cycle.
- Optimizing each manufacturing facility in terms of availability, throughput and quality.

Asset effectiveness is more commonly known as OEE (Overall Equipment Effectiveness) within the manufacturing industry. It is an approach to driving higher productivity from a given equipment base by identifying and implementing improved manufacturing practices to increase equipment availability or “up-time,” process throughput or “run-rate,” and “first-pass” quality (making products right the first time, without rework). It is typically expressed as the following mathematical equation:

$$\text{OEE} = \frac{\text{Actual Operating Time}}{\text{Total Available Time}} \times \frac{\text{Actual Production Rate}}{\text{Maximum Demonstrated Rate}} \times \frac{\text{Parts Produced Right First-Time}}{\text{Total Parts Produced}}$$

OEE seeks to boost asset effectiveness by enabling higher sellable outputs with the same or fewer inputs, i.e., produce more with fewer resources. OEE’s value is that it provides a framework for actionable plans to improve manufacturing performance. For example, using the formula above, there are several ways to increase OEE including:

- Implementing better preventive maintenance practices to reduce or eliminate unplanned equipment downtime (improve uptime).

- Working with customers to improve visibility into future demand addresses scheduling and planning issues that cause frequent changeovers during shifts (improve Actual Operating Time).
- Implementing Lean principles to improve product flow (increase Actual Production Rate).
- Deploying Six Sigma to identify and eliminate sources of variability in order to reduce scrap and re-work (increase First-Pass Quality).

This is by no means an exhaustive list and the process for maximizing OEE requires expertise and the commitment of time and resources. However, the economic payback can be significant. By way of example, one of our smaller portfolio companies – a food products manufacturer – implemented OEE across their two manufacturing facilities and reduced actual production costs by an annualized \$1 million, or >6% of total plant labor and burden, within three months. They have an additional \$1 million of projects in various stages of implementation that should improve throughput and raw material yields. The management team has embraced the process not only because they have seen production surge despite a net decrease in headcount, but also because OEE has improved equipment reliability and quality.

In today's challenging operating environment, it is critical that manufacturers leverage their assets optimally to drive earnings growth and shareholder value.