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Fundamental to success in any organization is getting individuals to work toward common goals. Whether that's a team of five on the court or a corporation of 50,000 associates scattered across the globe, knowing the goal and working toward unified objectives help every individual contribute. In global manufacturing, however, we frequently see a disconnect in this unified approach.

As global economic trends lead to changes in manufacturing strategies, companies today are realizing that successful financial performance can only be achieved when functional decisions are synchronized and fully aligned with plant or corporate goals and objectives. In rethinking the value and contribution of the manufacturing organization, companies have an opportunity to revitalize their business performance and bring new capabilities to their strategic focus.

A historical disconnect

The front office traditionally has had little direct infl uence on the plant fl oor beyond providing budgets and productivity demands. Conversely, the plant fl oor has little executive visibility, meaning manufacturing considerations are less likely to be taken into account when corporate managers are setting business objectives. In the rare instances when these overarching objectives are communicated to those responsible for the plant fl oor, it's difficult to reconcile them with plant fl oor deliverables, as the corporate terminology and plant floor metrics rarely converge. This leaves plant managers to set goals and make decisions that risk running counter to the company's overall objectives as they strive to reach productivity metrics.

The renewed emphasis on effective capital asset management is putting increased pressure on plant managers to contribute to the growth and financial performance of their organizations. The touted benefits of individual initiatives, such as process efficiency and improved quality, mean little if they fail to help plant fl oor personnel understand how they can help address the fundamental corporate goals.

One difference between organizations that succeed and those that fail has to do with the way the manufacturing function is structured, the responsibilities and tactical vision of the plant manager, and the level of integration between plant fl oor decision making and the strategic direction of the enterprise as a whole.

Clearing the hurdles

One of the main obstacles to strategic alignment is the modern global enterprise itself, which is comprised of multiple facilities and widely dispersed geographic locations. On the plant fl oor, localized tactical deployments and siloed functions have led to unique, dedicated systems for manufacturing planning, execution, process control and tracking, oftentimes for each plant. Consequently, the plant fl oor has become the sole focus of the plant manager, where decisions are made primarily to meet production deadlines and efficiencies, rather than with a more holistic view of company objectives.

Central control through large functional departments also can act as a barrier to strategic execution. Executives typically develop strategy at the top and implement it through a centralized command-and-control culture. This system was acceptable 40 to 50 years ago when change was incremental, but is inadequate in today's dynamic business environment. Rapid changes in technology, competition and regulations mean that strategy development and implementation has to be a continual and participative process.

Coordinated metric development is another fundamental challenge to strategic alignment. For instance, in many companies, there is no visibility to the losses incurred from unnecessary downtime or late deliveries, and no tangible returns attached to manufacturing's role in meeting quality standards or making on-time deliveries. Consequently, many companies grossly underestimate the overall effect plant fl oor decisions have on the company's bottom line.

Communications is another hurdle. Organizations today need a language for communicating strategy as well as processes and systems to implement strategy and gain feedback about it. If the strategy does not get translated through the organization to each individual person, then

successful execution is at risk. Ultimately, people must have a "line of sight" between their role and the objectives and implementation of the strategy.

Integration at all levels

Much of the progress companies have made toward strategic alignment has been simply the result of better information integration across the enterprise. Tremendous operational efficiencies have been gained by connecting "islands of factories" together into a single integrated manufacturing enterprise. This allows companies to drive operational excellence across and beyond the entire enterprise, including business processes, supply chains and customer networks.

For example, planning long-term shutdowns for capital repairs needs long-term visibility into sales and operations planning. Likewise, the factory supply chain needs to consider and integrate the maintenance function in order to be responsive and proactive. This requires rethinking the way plant fl oor functions are executed, as well as providing support through integrated systems that unify data protocol across plant-wide systems and processes and into executive suites.

This seamless information sharing results in knowledge that improves performance and meets core business objectives. If the plant fl oor understands, for example, that on-time delivery is more important to helping reach corporate customer-satisfaction goals than cost savings, it can add a second shift to help meet those on-time delivery goals.

While most plant fl oor decisions are grounded in the same fundamental vision as the rest of the company, the manufacturing function often operates with different priorities and different reward systems than the rest of the organization. Achieving strategic alignment requires every organizational function to be working toward the same goals. This means strategy must be communicated and then aligned with the personal objectives of individuals throughout the organization—*not just at the corporate level.*

Just as corporate managers often don't see eye-toeye with plant managers, the reverse is also true. When communicating the value that manufacturing provides, plant managers need to link results back to the metrics that drive the company's business, demonstrating how these pertain to management goals and customer demands. For example, how will installing a new condition monitoring system help improve equipment uptime and reduce expenses related to lost production and scrap? More specifically, how does this impact the priceper- product ratio—*an*

underlying management goal?
Another example is the incompatibility of purchasing metrics with overall plant management's capital spending goals. There are instances when purchasing's focus on lower prices may lead to decisions based on unit cost rather than total installed cost of the system or long-term maintainability.

Naturally, each group pursues business objectives from different perspectives. In many cases, distinct differences in language and methods of communication lead to misinterpretations and a general lack of understanding between the top fl oor and the shop fl oor. Therefore, it's important that organizations translate the strategy into operational terms.

For example, most companies hinge their success on a simple principle: deliver high quality products at affordable prices. To meet this goal, every facet and supporting element of a company's manufacturing process needs to be as lean as possible.

By leveraging a plant fl oor strategy that focuses on reducing expenses, improving uptime and optimizing production processes, the company can parlay this philosophy into higher profits in the long-term while gaining a distinct competitive advantage. Without a cohesive understanding of these objectives, however, support personnel might take a short-term view of this approach and cut costs wherever possible, sacrificing the long-term goal for short-term gains. For example, the condition monitoring system mentioned before may provide significant long-term productivity benefits to the factory, but budgetary constraints and performance metrics driven through the purchasing department may lead to a more traditional system. The unit cost would be less but the ongoing benefits would be lost.

In other organizations, the value brought by the plant fl oor may be measured by how it impacts production throughput. Here, the equation is simple: if machines aren't available, the company can't produce products and profit opportunities are missed. In this scenario, the entire manufacturing organization takes equal responsibility for uptime, quality and profitability. The goal is to make a certain number of units per day, based on market demand, and do whatever it takes to get it done.

In this situation, the priority of plant fl oor personnel isn't on preventive activities, but rather on directly supporting production output goals. But, if a plant manager is not briefed on the strategic objectives of the company and how they apply to him, he or she may approach the repair intent on getting the plant up and running as cheaply as possible. If a plant manager

knows the company objective involves a long-term approach to productivity and profitability, all the options may be reviewed in order to find the one that meshes best with the company's goals.

Measurement is key

Finding a way to measure improvements is an important step toward achieving strategic alignment. Every organization measures success by some metric, whether it's price per unit, earnings per share or total sales. Unfortunately, the metrics used in the front office aren't always easily converted into day-to-day tactics employed on the plant fl oor or in other internal departments, like marketing or accounting.

Despite changes in the speed of business and the availability of information, the methods for evaluating corporate performance remain largely unchanged. The problem with many of these tools is they offer a siloed approach and fail to capture many of the interdependencies among functional areas and link them to wider business goals.

A multi-dimensional view is necessary because any one performance measure can be managed to the detriment of other measures (i.e., the benefits of reduced inventory can be offset by an increase in overtime and expediting costs). Consequently, it's imperative that measurements be based on the priorities of the strategic plan and that they provide data about key processes, outputs and results.

The measures should be selected to best represent the factors that lead to improved customer, operational and financial performance. For example, most plant managers are concerned primarily with short-term budgets and productivity. A company that includes sustainability as part of its strategic objective, though, needs to brief its plant manager(s) on that goal so they take these elements into account. Such an approach might encourage investing in energy-efficient drives to reach sustainability metrics.

One technique that has proven effective in helping companies align their business and plant-level strategy is the development of cross-functional scorecards, sometimes referred to as "Balanced Scorecard." Used for more than a decade as a strategic planning and management system for driving accountability for execution, the Balanced Scorecard creates a system of linked objectives, measures and targets, which collectively describe the strategy of an organization and how that strategy can be achieved. Individual departments can retain their individual priorities yet know their contribution and role in the overall strategic framework.

One advantage of the Balanced Scorecard approach is that it provides a framework that adds strategic non-financial performance measures to traditional financial metrics to give managers a more "balanced" view of organizational performance. To provide detailed strategy at the corporate as well as plant level, companies can build scorecards for all business units and key support functions. When implemented successfully, it offers a truly bottom-up approach, supplying managers with feedback around both the internal business processes and external outcomes in order to continuously improve strategic performance and results.

Widening the accountability

Nothing kills a strategy faster than under-committing resources. Thus, it's critical that managers understand the financial commitments that are required to implement a plan and provide the necessary support once the plan is approved. While there are no easy choices or silver bullets here, the foundation for strategic alignment is one that takes a disciplined approach, includes well-defined, balanced objectives and drives accountability and transparency for the decisions and actions that are made.

With today's advances in technology, companies now can fine-tune almost every phase of production for maximum yield, quality and profit. Still, technology is only part of the equation. The ability to align business strategy across the organization is the missing link. While a unified business strategy isn't going to solve every problem, it does widen the accountability for financial performance from the top fl oor to the plant fl oor. This is one trend that most certainly will pay dividends in today's highly competitive manufacturing market. **MT**

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