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## Improving Business Operating Consistency, Performance

by Scott McDermott

Volatile feedstock and ethanol prices, pressure on profit margins, emerging technologies and increasing competitive scale are all challenges to success in the ethanol business.

Changing markets are creating both opportunities and risk. The good news is that there is hidden value locked inside most ethanol plants just waiting to be found. The direction a given plant takes to capture this hidden value will depend on the board of directors' short-term and long-term visions for the business. If management does not know where it wants to go, the outcome is left to chance.

Ethanol plant boards and management have many options around what they can do to position their business for long-term sustainability. Most plants focus on increased scale (expansion, mergers and acquisitions), but there are other options as well. For example, plants can take steps to diversify inputs, products and energy utilization, develop higher value products, integrate in a new complementary or non-complementary business, or cash out all or part of their investment.

Most of these initiatives represent major undertakings for the business and will likely entail the need to raise or realign capital and take on risk because there are no guarantees of business success. While most plants are likely to take on some of these bigger initiatives over time, things can be done today to increase efficiency, performance and flexibility. A good test of the readiness of an organization includes asking the questions in Figure 1.

If the answer is "no" or you do not know the answer to more than a couple of the questions in Figure 1, there is probably an improvement opportunity within the business that will make it better, cheaper and/or faster. Industries such as oil and gas, chemicals, power generation, pharmaceuticals, commercial agriculture processing and others have been utilizing this systems approach to managing their businesses for years. The management mantra is "you can't manage what you can't/don't measure." A key challenge is: How well are you leveraging information within the organization to improve consistency and performance across the organization?

Is the organization collecting local, regional and national prices (basis) and tracking local and regional production and storage trend data to support grain origination, ethanol and distillers grains marketing and risk management? The commodity markets are undergoing one of the largest structural changes in history, and the outlook is for more volatility.

Many ethanol companies are making decisions on corn origination based on the way their corn market behaved in the past instead of the current market realities. Do you have written, strategic marketing plans for the product streams? Do you truly understand the factors that are driving the local, regional and national markets? If you are not tracking and analyzing market trends in your own backyard, how will you make quantified and informed decisions on physical and financial risk management?

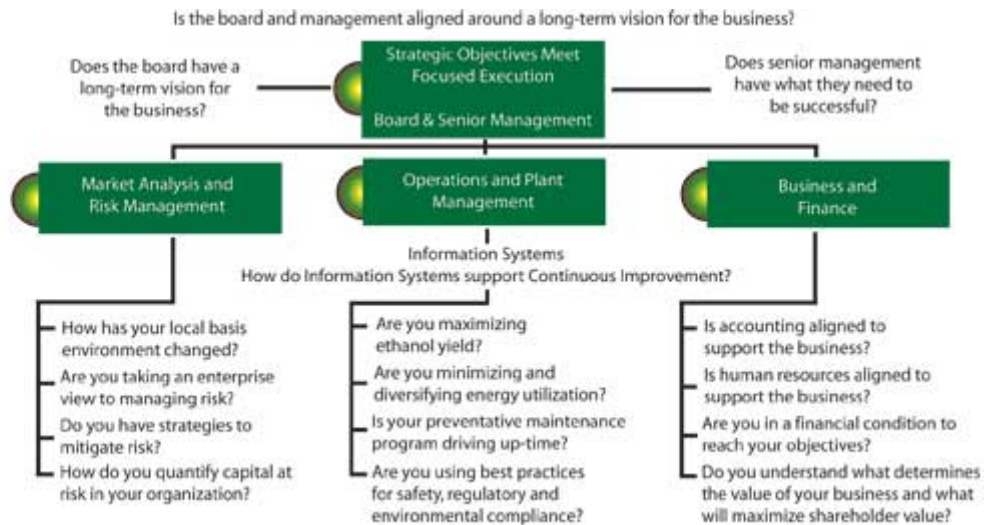
All plants are trying to improve performance every day, but many are doing it with the same tools they have always used: clipboards and checklists. Few plants are capturing this information electronically in a form that can be used to monitor trends, make real-time informed decisions and support proactive maintenance using predictive modeling. It's not easy to do. There is a wealth of valuable information from the laboratory, manufacturing system and operators that is rarely being collected in a way it can easily be used to analyze and improve performance.

The exception is the larger commercial processors who focus on operational excellence across all of their manufacturing businesses, including ethanol. These companies have invested in the information systems and aligned management and employees around operational performance improvement. As a result, these companies have better and more consistent starch conversion, better utilization of enzymes and yeast, a lower instance of infection and a better ability to catch infections early and adjust. They also have a more optimal balance between batch cycle times and ethanol yield, a more consistent ethanol concentration from distillation, and lower utility usage. In this environment the organization is more proactive instead of reactive and is therefore a more consistent and higher performing business.

Another key focus area that supports improved consistency and performance is predictive and preventative maintenance. Basically, all of the ethanol plants are using some type of maintenance management system, but their

approach to maintenance management varies greatly. Most companies use these systems as a checklist to inventory parts and make sure staff is doing regular maintenance. Others are taking this concept to a higher level, and the result is greater overall asset utilization, lower emergency downtime and overall lower maintenance costs.

Figure 1.



These questions provide a good test of readiness for an organization.  
SOURCE: ASCENDANT PARTNERS INC.

Some examples are seemingly small things such as routine hands-on inspection of equipment, replacement of lubricating fluids, and annual cleaning and replacement of specific equipment. Another example is using more sophisticated equipment and control systems that can monitor specific aspects of different equipment to aide in determining repair/replacement needs prior to failure instead of using time-based rules of thumb to determine when to replace parts and equipment. Some companies are also implementing oil analysis techniques, vibration monitoring and thermal imaging to further increase a proactive strategy to maintenance. The same companies are also putting into practice world-class safety and regulatory compliance programs. The result is a more disciplined and well-run business, better employee engagement and insurance rates, and an environmental record the company can use to show the world its commitment to sustainable business practices.

By improving consistency and performance at the core of the business, it is much easier for the supporting function to plan and support the business. Management will have a clear strategic direction and alignment with the board, which in turn allows them to give clear direction and create clear accountability for staff. Training, compensation and recognition can then be clearly tied to meeting management and board objectives, which motivates staff to contribute to making the business better because they understand how they and their peers contribute to creating a successful business.

Instead of budgeting and capital planning being a painful and timely process, it becomes a fluid part of the proactive approach to doing business. When the right information is available, this process improves from being a once per year exercise to continuous improvement. Decisions are easily quantified and prioritized relative to the business objectives and bottom line impact. Companies can easily justify capital expenditures that have immediate payback instead of waiting months or even years to identify the issue and pull together all of the information to justify the investment.

In the end, the owners of the business have a more valuable business because they can clearly show prospective buyers or investors why and how they are successful. Potential buyers or investors have transparent and tangible proof that what they are buying or investing in will run well. Organizations can also quickly evaluate the implication of new opportunities such as mergers and acquisitions, expansions and new business lines, all while increasing the odds of success.

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