Scanlon Principles Lay the Groundwork for Lean

Discovering the greatest motivator for human performance.

Karen Wilhelm

The history of the Scanlan Plan is still relevant to engaging employees in process improvements today. Paul Davis, president of the Scanlon Leadership Network, says the Scanlon philosophy is alive and well, and the Scanlon Leadership Network counts companies such as Magna Donnelly, ITT, TG Fluid Systems, Wescast Industries, Ferro, Nicholas Plastics, Thomson-Shore, Smith’s Dairy, and Limerick Veterinary Hospital as members. It’s a philosophy that has come to encompass many elements of lean. Gainsharing is just a means of equitably sharing the financial benefits of employee involvement, leadership engagement, continuous improvement, focus on the customer, integrated strategic and tactical planning, and innovation.

A Plan Forged in the Steel Mill

As Paul Davis tells it, in the 1920s Joe Scanlon was a cost accountant, steel furnace attendant, prizefighter, and union organizer. "He could make $1000 a night fighting while he worked as an accountant," says Davis. "He’d come into the office black and blue. Eventually, his boss said, ‘You can’t be an accountant and look like that,’ so Scanlon went into the mills." Back then the mill was ruled by scientific management, with some people as the heads and others as the hands. Piecework systems at some companies were an attempt to provide motivation, but people are notoriously able to defeat such management schemes. They don’t take well to systems that pit one worker against the other, ostracizing the "rate-buster" or hoarding output at one part of the day and releasing it at another when they wanted to take it easy. Management efforts to improve productivity were resisted, since they usually took the form of speeding up processes or loading up people with heavy labor.

Scanlon was elected to represent the workers in collective bargaining. Because of his cost accounting experience, he could tell the company didn’t have enough money to pay the workers what they were demanding. Scanlon asked union headquarters what to do. And they came up with

In Brief

There's more to Scanlon Plans than gainsharing; trust is a key element and suggestions are at their heart. This article explains that lean and Scanlon are based on similar principles — recognizing that the committed cooperation of the average worker is critical to the success of the organization. Philosophy and beliefs are more important in both systems than tools.
a radical idea: "Go back and see if you can help the company. If you can prove that the company makes money, they can give you higher wages." The origin of the Scanlon plan was labor-management cooperation: "Let's sit down and try to solve our problems together."

Cooperation saved that company, and because there were many companies in similar situations, the Steelworkers International sent Scanlon around to set up joint labor-management committees. By 1945, according to an article in the September 26, 1955 issue of *Time* magazine, "Scanlon was able to take bits and pieces of what he had tried out in dozens of companies and put them together at the Adamson Co. of East Palestine, OH, a small maker of welded steel tanks. He started by determining a 'normal' labor cost per unit, then set up a system for a 50/50 split of the savings the workers made by producing at less than normal cost."

"Soon," the article continues, "the new joint union-management committee was flooded with workers' suggestions. Welders who had stood around waiting for materials began helping to unload. Workers formerly indifferent to substandard work turned out by slackers began raising Cain; it cut down their bonus. Employees and executives became a team working toward a mutual goal. After a year, the Adamson Co. was five times as profitable as in the old days; even after sharing the productivity savings 50-50, management still reaped twice as much income." The rough outlines of the Scanlon Plan had begun to emerge.

Even now, suggestions are at the heart of Scanlon Plans. The traditional suggestion system is a box on the wall. The employee drops in a piece of paper. Then some remote management committee reviews the suggestions and if one is deemed usable, the person who offered it is given an individual bonus. In Scanlon's system, you didn't put anything in a box. Employees filled out a suggestion form, just as a record-keeping device. The real process started when the suggestion was discussed at the work team level. If the work team decided it was a good idea, they

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**Five Alignments of Hoshin Kanri Planning**

1. **Strategic alignment**: Identifying annual goals and objectives from long-term company business needs. Clarifying the priorities of the president and officers. For each goal, methods, performance indicators, and this year's targets are identified. Goals/hoshin plans are then developed at company, department, section, and individual levels.

2. **Horizontal alignment**: Lead departments review data, secure buy-in, agree on strategies, confirm support, and follow up on each goal. Related departments serve the lead department by agreeing with the goal, working on it, recognizing the need and disagreeing with the need when appropriate, and taking action to achieve the goal. All functions must be aligned. A matrix is created to illustrate exactly how each function's goals and targets will contribute to each of the company business goals.

3. **Vertical alignment**: The deployment of company goals downward to successive levels. This form of alignment involves breaking down their measurement indicators and targets by department, section, and employee levels.

4. **Process management alignment**: The system of process management includes problem solving, never-ending use of the plan-do-check-act (PDCA) process, and follow-up effective solutions to problems. Standardized solutions are then implemented as best practices into each process's daily management activities.

5. **Subordinate development alignment**: Subordinates must be involved in planning, checking, and problem solving or development does not occur. The set of behaviors necessary to achieve this alignment involves superiors coaching subordinates in problem-finding and problem-solving activities. "Assist, but do not take over" is the byword for the supervisor's role on this alignment. Consistent with this alignment is the encouragement of frequent suggestions by employees.

*Moore, Mothersell and Reinerth, Hoshin Kanri Planning: The System of Five Alignments behind the Toyota Production System.*
were usually authorized to implement it. If it involves more money than the work team is authorized to spend, affects other departments, or even if it is rejected, a screening committee made up of representatives from throughout the plant takes it up. Davis says, “Scanlon was really coming up with industrial democracy, plus a continuous improvement system with some teeth in it, because every suggestion was logged and tracked. At the screening committee you had the president, plant manager, or CEO of the company and they could see whether or not issues kept coming up that weren’t resolved. Or maybe there’s a supervisor who rejects every idea because it’s a threat to him. It took away a lot of the adversarial aspects of improvement ideas and put everybody on the same page, across departments and functions. It was extremely successful. It still is.”

Scanlon believed that people are motivated by much more than money. He didn’t want people focused on money. He wanted them focused on improvement. As companies improved, the questions arose, “What’s fair? How do we share the savings?” This was the origin of gainsharing systems. If you improved the company, you would share in the gain.

By 1955, says Time, the plan was “working in some 60 plants from furniture to steel, where profits were excellent and where they were nonexistent, where labor relations were good and where they were bad, where labor productivity was easy to measure and where it was virtually impossible. But the plan cannot operate without the wholehearted agreement of both management and unions. It requires a strong union, able to guarantee the support of its members. It also requires a management willing to open its books and innermost production secrets to union members. And the plan demands a sense of management-union cooperation that is often most lacking in the plants that most need Scanlon’s help. Scanlon refuses even to try unless he is convinced that the two sides will work together. Once, in desperation, the union and management of a deeply troubled plant arrived in Scanlon’s office and announced they were all ready to try out his plan. Scanlon looked at the glowering men arrayed on both sides, each with a watchful lawyer, and said: “Yeah, you’re all set to get the hell out of here.” The camp within the steelworkers that advocated cooperation lost out to the one that advocated the more traditional adversarial union-management relationship. Scanlon was out.

That’s when Douglas McGregor, known now mostly as a management textbook footnote about Theory X and Theory Y, invited Scanlon to MIT as a lecturer. McGregor was known for bringing together a lot of different kinds of brilliant people from different perspectives, as he created an interdisciplinary social sciences research unit.

**Frost's EPIC**

One of Scanlon’s disciples at MIT was Carl Frost, a young psychologist and former cost accountant, who moved to Michigan State University in 1949. He carried on Scanlon’s work after Scanlon died in 1956. Frost began to distill the principles behind Scanlon’s practices.

“One of the things that’s held us back for years as a philosophy,” explains Davis, “is that some academics got the idea that gainsharing systems were defined by the formulas that were used. The formula first used was based on sales to labor. If I know how long it takes for me to do something, and I could cut out some of that time, I could make the company stronger. That was something employees could understand. It wasn’t that Joe was just wed to labor formulas but Joe was very much wed to the idea that if people don’t understand the formula, they’re not going to trust it, and it isn’t going to be something that’s going to help. So back then, when a lot of people were illiterate, didn’t understand English well, didn’t understand accounting and so on, those formulas were very useful. In a lot of the academic books, Scanlon is identified by gainsharing systems by formulas, and they miss the whole continuous improvement aspect. Scanlon’s about gain making as well as gainsharing, but the
books only focused on the gainsharing."

The Frost-Scanlon principles, in a nutshell, spell EPIC. Although the acronym doesn’t fit the word order exactly, the principles are built up from the first to the last.

Identity

Frost said the first one is identity, “Do most people understand reality of their organization?” He meant, says Davis, “Do you understand who your customer is? Do you understand who your investor is? Do you know if you’re making or losing money? What’s the most important thing you should be working on? How do you know if you’re doing it right?” Most people didn’t have a clue.

Frost’s principle of identity incorporates a lot of ideas, including open-book management. Most of the Scanlon companies share the financials because that’s the way most organizations keep score. But it’s not just financials, the companies share production information and other metrics as well.

Davis relates the Identity principle to lean manufacturing philosophy. “One of the great things about lean,” he says, “is that the production information’s in the hands of the people who are doing the producing. I know there are a lot of really great lean companies who probably wouldn’t take it to the level we do, but we think it’s important that everyone understand the financial piece. If you don’t understand the reality of your organization, you really can’t improve it.”

Companies do a number of things to bring reality home to employees. They take tours where people see how what they do goes into their customers’ products and services. They’ll have bankers out to talk to them about what investors expect. Frost was working with Worldwide, maker of Hush Puppies shoes, some years ago. Sales were slow. So they took employees to a mall, gave all them money and told each of them to go find the best pair of shoes they could find. When they came back, none had bought Hush Puppies. From that experience with reality, they could see the urgency of change.

The Scanlon Leadership Network says the greatest motivator for adult human beings isn’t money, it’s reality. When they understand reality, most people will be motivated, whether it’s to save their jobs, or do what they need to do to make their company better.

Participation

The second principle is participation. That’s defined as an opportunity management provides to employees, to influence decisions in their area of competence, that they can accept or not. Management can control how much you can participate. Most organizations aren’t democracies, so while we expect the leaders to be open to influence, it doesn’t mean that an employee gets to vote on whether we make product today.

In a Scanlon system, people aren’t involved for involvement’s sake. There’s an understanding that the more people know, the more they ought to be able to influence decisions, and the person closest to the work knows the most about that area. Suggestion systems are fundamentals of the participation principle.

Equity

The third principle, equity, is about balancing the needs of the key stakeholders: the employees, the customers, and the investors. In many companies, it’s also the community and suppliers. If you don’t have people focused on the key stakeholders, people will try to maximize just their area to the detriment of the organization. Customers are very demanding, but if they make you sell product below what it costs you to produce it, you can’t do that very long. If management or leadership only focuses on the needs of the investors, the investors will maximize return and destroy the organization. And you can cater to just the needs of the employees, and you’ll lose your investors and your customers. The tension of trying to manage the three makes the Scanlon Leadership Network different from a lot of organizations. Every employee should know those key stake-
holders and what their needs are to be accountable to them. The Network helps its members conduct employee and customer satisfaction surveys. There is no best measure of investor satisfaction, but Davis says if you’re trying to find just one measure of investor satisfaction, economic value added is probably the best choice. Return on the money invested has to be greater than what you could get at the bank. So even in private companies like SGS Tool, Inc., those employees need to know what the Haag family needs as a return, and what’s a fair return. It has to be discussed.

**Competency**

Competency means continuous improvement personally, professionally, and organizationally. The idea can reach far beyond the plant floor or office. One company found its employees came from a population that didn’t have very many homeowners, or a lot of experience with personal financial management. So they spent evenings teaching interested employees how to do budgets, took them to the bank, and even helped them get their first loan. Today many of them are homeowners.

**The Plan**

Every organization has its own “Scanlon” plan, designed to fit its situation. It can be described as an organizational constitution. It’s a small document that’s created collectively, where the employees say they are going to share information, how they are going to involve people, how they are going to make sure the company is treating everybody equitably, and how they are going to increase competency. It addresses our four principles, and it’s done participatively. Most Scanlon organizations will set a goal of getting 80-90 percent of employees to agree on the plan or it’s not implemented. This creates incredible commitment to the plan. These days people are fond of saying, "Are you on the bus or not? The bus is leaving." On the Scanlon bus, people have more of a say as to how it’s going to be driven.

Not all of the Scanlon Leadership Network companies do that. It’s a federation of companies — each one interprets the principles in their own way. Some of them will do the Scanlon Plan, some companies don’t have a Scanlon Plan, but they follow the principles. Then some of the companies in the network probably aren’t following the principles and don’t have a Scanlon Plan — they just want access to products and services.

**Donnelly Brings Lean to the Scanlon Leadership Network**

When a group of Japanese business leaders came to the United States on a study mission in the 1950s, they were introduced to McGregor’s book, *Human Side of Enterprise*. It talks about the whole person idea, that people are more than just their hands and how to get cooperation from them. The book has a whole section on the Scanlon Plan. According to Warren Bennis, “The Japanese took Joe Scanlon’s ideas concerning worker involvement ... and the ideas of W. Edwards Deming ... now people are adopting Japanese management techniques without knowing that many of them were Scanlon’s ideas.”

Donnelly (now Magna-Donnelly), the world’s leading manufacturer of automotive mirrors, helped create the Scanlon Leadership Network and has had a Scanlon Plan for over 50 years. Widely benchmarked for their participative systems, Donnelly pioneered the use of teams in industry, had no time clocks, and a no layoff policy. Donnelly employees even decided their pay increases through their "Equity" process. Donnelly was considered one of the top ten best places to work in America.
While they supplied most of the mirrors used on automobiles in the United States, they had some real problems supplying Honda. They went on a crash course on lean, becoming one of its early adopters. Despite its experience with employee participation and continuous improvement, Donnelly thought it needed to bring in some lean gurus. They went through the plant and made major changes. People were upset when one of the changes was to take chairs out of a production area. One employee brought a chair back in. "The guru," says Davis, "got ticked off and threw it in the dumpster, and the whole plant shut down. Donnelly, a leader in employee involvement couldn't get the employees involved in lean. So they went back to Scanlon principles. Do the people understand what lean is? Why do they have to do it? What benefit will it have?"

As a result, Donnelly's Art Smalley and Russ Scaffede, who both had Toyota experience, developed a lean simulation to help develop that understanding. It uses small wooden models of injection molding machines, a paint line, and other processes used at Donnelly plants. The simulation became a hit, and all the Scanlon Leadership Network members wanted it. Donnelly didn't want to be in the simulation training business, so they gave the Network the rights to market it. The Network hired an instructional designer to create a broadened simulation and a generic leader guide. It has been used to introduce lean to employees at many companies, including the new GM plants in Lansing, MI.

**Hoshin Planning**

Later, Donnelly started experimenting with hoshin planning, or policy deployment. The Network recognized that it fit the Scanlon Identity principle. It takes the strategic plan and helps cascade it down, making sure people understand it. It's participative. Through Donnelly's experience, the Network developed a training program called Hoshin Quickstart. As with the lean simulation, members saw ways to improve the templates and other parts of the program.

Michael Reinerth, human resources (HR) director, Lansing Grand River Assembly unit of GM, was at NUMMI when it began to focus on policy deployment. He and Michael L. Moore and William Mothersell have studied hoshin planning (see "Five Alignments of Hoshin Kanri Planning") and identified how companies need to align planning. The five alignments are: 1) strategic, 2) vertical, 3) horizontal, 4) process management, and 5) subordinate development.

Moore and Mothersell have been looking at how evident the five alignments are at Scanlon Network member companies. They have found that network companies are integrating some of the alignments better than others. Probably the biggest area of weakness in current hoshin planning practice, says Davis, is the alignment that helps develop employees. Toyota uses hoshin for subordinate development, as they call it, helping people learn to set and pursue their own goals aligned with company goals. "Hoshin is not just a series of forms or another Japanese version of MBO that managers can use to whack people," Davis says. "If it's done the way it's supposed to be done, it's an incredibly beautiful idea. But it's hard to do that. When you let an employee set a goal that may be too high or too low, how do you coach them? That's the art."

**People, Lean, and Innovation**

The Scanlon Network’s Leadership Roadmap says people, lean, and innovation are three linked commonalities that drive an organization toward providing the best value to customers, which results in a strong competitive advantage and a winning organization. Innovation is the Scanlon Leadership Network’s emphasis for 2007-2008, and will be the theme of its annual conference in Dearborn, MI in 2008. Members participated in an innovation survey at the 2007 conference. "The survey results from Scanlon companies were average, implying there is room for more inno-
vation," says Praveen Gupta, president, Accelper Consulting. "Scanlon is focusing this year on innovation to help members grow through innovation."

One way the Network is helping members improve in this area is by conducting tours for both leaders and front-line employees of innovative companies, starting with 3M, hosted by the GRIT team (the 3M engineers and leaders who helped develop and launch the Post-It Note phenomenon). The tour’s next stop is Motorola and the Motorola Innovation Center.

Lean and Scanlon are successful together because they are based on similar principles. Both recognize that the committed cooperation of the average worker is critical to the success of the organization. Philosophy and beliefs are more important in both systems than tools. Scanlon is more about trust than gainsharing. Lean is more about involvement than rapid die changes, or continuous flow. Both systems have stood the test of time, providing a proven roadmap for leaders who wish to create organizations that provide worthwhile employment, produce worthwhile products or services, and generate worthwhile investment returns.

**Humanity and Hope**

Some members of the Scanlon Leadership Network are tuned into the Scanlon philosophy, but others just want the practical applications and tools. Davis says that when he came into the network as Frost was retiring, he was really concerned about building up the toolset. "We went helter skelter into creating a lot of tools," he says, "and I think we almost lost the soul of the organization." Further study indicated that the magic comes when principles are combined with the tools. "Unfortunately, that’s what’s missing in a lot of organizations today. The leadership churn is so great and the pressures are so intense, they’re losing their humanity," Davis adds. "D.J. DePree, the founder of Herman Miller, said it really well. He said, ‘A company is rightly judged by its products and services, but it also must face scrutiny as to its humanity.’ You take away the humanity, you’ve just created a zombie. Holding up to the light organizations like SGS that are competing and doing well while still keeping their humanity, may give hope to the rest of us. We’ve got to give people hope. Without hope it’s just really rough, especially in manufacturing today."

Davis likes to tell the story of the prophet and the king. "The prophet stood outside the castle gate and told the king, ‘Your people are starving, your people need help,’ and the king would ignore him. That went on for many years, and finally the king said, ‘You’re never going to get me to change. You are wasting your time.’ The prophet replied, ‘You missed the point — you never got me to change.’ That’s who we are."

*Editor’s note: See the related article, "Associates Participate in Making SGS Tool Company Globally Competitive" in this issue.*

*Karen Wilhelm is a freelance writer and publisher of the blog, Lean Reflections.*